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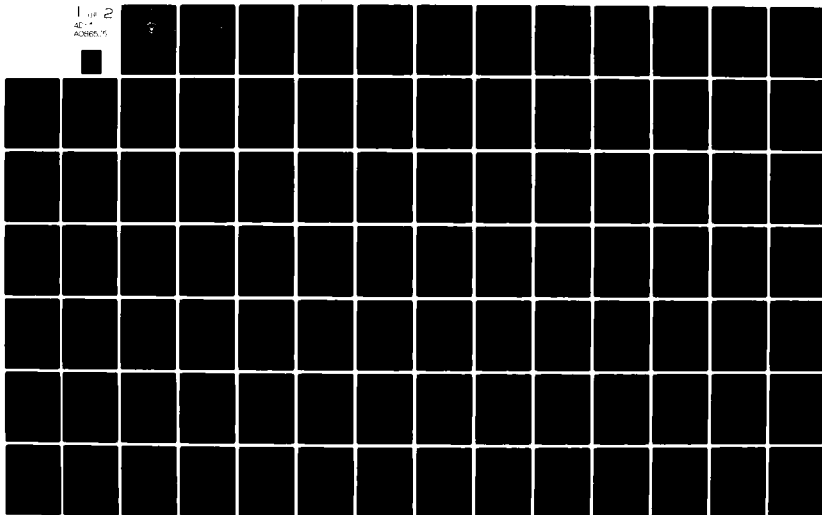
ADEQUATE COMPENSATION FOR A PERMANENT CHANGE OF STATION MOVE: A--ETC(U)

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ADEQUATE COMPENSATION FOR A
PERMANENT CHANGE OF STATION MOVE:
A STUDY COMPARING THE POLICIES OF THE
MILITARY, CIVIL SERVICE, AND PRIVATE SECTOR

by

Gregory Lee Hansen

and

Dwight Warner Handforth

March 1980

Thesis Advisor:

E.A. Fincke

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Adequate Compensation for a
Permanent Change of Station Move:
A Study Comparing the Policies of the
Military, Civil Service, and Private Sector

by

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Submitted in partial fulfillment of the
requirements for the degree of

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ABSTRACT

Military members, by virtue of the requirements of military service, are frequently required to move. The adequacy of compensation granted a military member for costs incurred during a permanent change of station transfer has been questioned. To determine whether or not this reimbursement is adequate, situation models of typical moves are developed. The constructive costs of these transfers are compared with the entitled reimbursements received by military members, Civil Service employees, and private sector employees. Comparisons among these groups indicate significant disparities. Recommendations are made to alleviate identified disparities between actual costs incurred and reimbursements granted for military members. The impact of each of these recommendations on the Department of Defense budget is developed.

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I. INTRODUCTION

A. BACKGROUND

Department of Defense officials have become increasingly concerned with the competitiveness of the military to maintain a viable work force. Apprehension exists in the ability of the military to maintain a sufficient inflow of personnel and its ability to retain the number of qualified personnel required to meet the needs of the services. The anxiety heightens in view of the decreasing pool of eligible candidates for military service that will be available in the 1980's and the current alarmingly low retention rate.

Military members, by virtue of the requirements of military service, are frequently required to move. Travel entitlements were established as a means of expense reimbursement unrelated to regular pay and allowances. Entitlements are granted on the basis of existing laws and internal Department of Defense policy. Since the first use of public transportation to effect these moves, the military has been concerned with the problem of devising the proper reimbursement policy for such travel. The hurdles to developing practical and equitable programs have been many.

The costs associated with moving military personnel and their dependents are high. Studies have traditionally concentrated on the expenses incurred during the actual physical travel involved. More recently, efforts have been made to evaluate the total cost picture. Included in the approach

are the expenses incurred in disestablishing a home and the subsequent establishing of a new place of residence.

On July 19, 1979 Secretary of Defense, Harold Brown, announced a special compensation study to be conducted. The study was to address two major areas: The overall adequacy of military compensation and the effectiveness and viability of selected special pays and reimbursements. One of the sub-areas to be examined was the entitlements granted the military member in conjunction with a permanent change of station move. This particular segment of the problem was offered to the Naval Postgraduate School for further study.

Although the basic issue is reimbursement for actual expenses incurred, considerable thought had to be given to the competitiveness of the military's reimbursement package. The advent of the all volunteer force has made it necessary for the military to compete with private business and the Civil Service for available manpower. For this reason, inequalities in the reimbursement policies of each could affect the ability to recruit the necessary manpower.

In a report to the Secretary of Defense by the Advisory Commission on Service Pay, the following statements were made regarding equality of reimbursement policy:

Allowances for travel and transportation should be the same for all branches of the Uniformed Forces, established at rates sufficient to cover all reasonable incurred expenses...

Expenses incurred in authorized personal travel and transportation of dependents and goods should not be borne by the serviceman; conversely, reimbursement by the Government should not result

in pay increase. These expenses are nothing more or less than administrative or overhead costs for operating the business of the Uniformed Forces. As in industry, payments for such necessary movement of people and property should not be associated with or charged to individual basic compensation. [5,2-2]

Using this philosophy, this research examined the adequacy of the current reimbursement policy followed by the military.

B. RESEARCH QUESTION

The research sought to answer the question: Is the military adequately reimbursing members for permanent change of station moves? By "adequately" it is meant that i) the difference between actual costs incurred and reimbursements received by the military should be minimal, and ii) the reimbursements received by the military should approximate those received by the Civil Service and the private sector.

C. SCOPE, LIMITATIONS AND ASSUMPTIONS OF RESEARCH

To determine the adequacy of military reimbursements for permanent change of station moves, the research was based upon and therefore limited by a typical move scenario. The scenario developed considers family size, two levels of income, the average length of move for each service, and expenses incurred during the move. A limitation on this research was reliance on published data. No independent surveys of the three employment groups (military, Civil Service, private sector) were undertaken for this study. Assumptions involved in calculations and definitions of costs are delineated in Chapters VI and VII.

D. METHODOLOGY

Two research methodologies were used, literature review, and data collection through interviews. The literature review was conducted in four phases. First, sources cataloged in the Defense Logistics Studies Information Exchange and the Defense Documentation Center were examined for relevant studies on permanent change of station reimbursements. Literature focusing on corporate relocation practices was located through computer searches of The Information Bank and local library sources. Internal Department of Defense documents were obtained from the Per Diem, Travel and Transportation Allowance Committee. Bibliographic sources identified in the selected studies were obtained.

Additional data was obtained through interviews conducted with government and private sector officials concerned with relocation policy. Included were interviews with representatives of the Per Diem, Travel and Transportation Allowance Committee and Cris Collie, Executive Vice President, of the Employee Relocation Council.

The analysis methodology generally centered on three avenues of investigation:

(a) A review of the reimbursement policies currently found in use by the military services, the Civil Service, and the Private sector.

(b) An analysis and compilation of current rates and prices of expenses that can be identified as being directly related to a permanent change of station transfer.

(c) A comparison of payment methods used by the three employment groups to reimburse the expenses incurred for a typical move scenario.

E. DEFINITIONS

A brief definition of terms as they are used in the study follow:

1. Military Members--Individuals, both officer and enlisted, who are serving in the Army, Air Force, Navy, and Marine Corps.
2. Civil Service Employees--Individuals who are employees of the U.S. Government in either the General Schedule, Senior Executive Service, or Federal Wage System categories.
3. Private Sector Employees--Individuals who are employees of private corporations based in the United States.
4. Permanent Change Of Station--This is a move from one location to another located outside the corporate limits of the first location. The move is necessitated by official orders in the Department of Defense or by a directed transfer in the Civil Service and the private sector.

F. THESIS ORGANIZATION

Chapter I serves to introduce the thesis question, point out the scope and limitations of the research, and define key phrases. Chapter II presents the background history of the reimbursement policies that have evolved in the military, the Civil Service, and the private sector. Chapters III, IV, and V develop the entitlements currently granted in each

group respectively. Chapter VI develops the current rates and costs of the expense elements associated with a transfer. Included are the cost of various modes of transportation, lodging, and meals. The adequacy of the military reimbursement policy is evaluated in Chapter VII. This is done by using the reimbursement policies of the military, Civil Service and private sector presented in Chapters III, IV and V to calculate compensation granted for various typical move scenarios. These reimbursements were then compared to the expected cost of the typical scenarios based on prices presented in Chapter VI. Chapter VIII presents the conclusions of the study and offers recommendations for more equitable reimbursement. The impact of each recommendation on the Department of Defense budget is also developed.

II. HISTORY OF TRAVEL COMPENSATION

A. GOVERNMENT AUTHORIZATION OF TRAVEL ALLOWANCES

The theory of compensation to civil servants for travel required in the performance of official duties is as old as the United States government. In 1789 the first Congress passed into law the authorizing of travel reimbursement for Senators and members of the House of Representatives. This legislation granted each member of Congress six dollars for each twenty miles (\$.30 per mile) of the estimated distance traveled by the most usual road. The allowance was paid from his place of residence to the capitol and back to his residence [78,70-71].

During the third session of the first Congress the legislature enacted what appears to be the initial allowance for permanent change of station expenses. On March 3, 1791, Congress granted the clerks employed in the several offices attached to the seat of government, reasonable and necessary expenses incurred as a result of moving the capitol from New York City to Philadelphia [79,216].

Congressional action authorizing a permanent change of station travel allowance for members of the military first occurred in January of 1795. The act provided a day's pay and rations to each soldier for every fifteen miles from his home to his place of rendezvous with his unit, whenever the militia was called into service for the United States. Equal

reimbursement was allowed for the soldier's travel home from his place of discharge [80,408].

The early laws and regulations specifically designated mileage as the standard on which the allowance was based. In the Army Appropriations Act passed in 1886, a provision stated that mileage was the only allowance which could be paid officers for travel. Unlike today, however, the primary purpose of mileage payments in the early years was to provide the officer with subsistence. Transportation expenses were covered directly by the government. This is illustrated by the wording of the Appropriation Act approved in August 6, 1894, which provided that:

The maximum sum to be allowed and paid to any officer of the Army shall be 4 cents per mile, distance to be computed over the shortest usually traveled route, and in addition thereto, the cost of transportation actually paid by the officer over such route or routes. [76,5]

A major change in the form of reimbursement occurred upon passage of the Pay Readjustment Act of June 10, 1922. In this Act a rate of \$.08 per mile was established for travel under competent orders. The difference from this entitlement to those granted in the past was the \$.08 was an all-inclusive allowance, covering both transportation and subsistence [76,6].

The laws enacted governing pay and allowances for the Armed Forces gradually developed into a literal hodgepodge that was so complicated and lacking in cohesion that no identifiable plan governing compensation of persons in the military existed. In response to the situation, an advisory commission on

service pay, known as the Hook Commission, was established in 1948. The recommendations submitted by the commission resulted in the Career Compensation Act of 1949 [82,2089]. This act became the basis of authority for travel pay entitlements for members of the military. Also passed during 1949 was the Travel Expense Act. It is the basis of authority for civilian travel reimbursement [82,166].

The Career Compensation Act and the Travel Expense Act of 1949 represent the most recent legislation establishing the guidelines upon which travel allowances must conform. Public Law 87-649, enacted in September 7, 1962, restated in comprehensive form the section dealing with military travel entitlements. Laws applicable to pay and allowances of members of the Uniformed Services are contained in Title 37 of the United States Code. Title 5 of the same code addresses the pay and allowances which apply to civilian employees of the federal government [76,7].

In accordance with sections of Title 37 and Title 5, the Joint Travel Regulations were adopted. Volume I, entitled "Members of the Uniformed Services", and Volume II, "Department of Defense Civilian Personnel", were issued, implementing the appropriate sections of Title 37 and Title 5 respectively. The two volumes of the Joint Travel Regulations delineate the entitlements granted individuals when performing travel under official orders.

For military members mileage remains the standard on which travel allowances are based. Part D, Chapter 4 of the

Regulations relates to "Permanent Changes of Station Allowances".

Paragraph 4150-1 reads, in part, as follows:

1. GENERAL. A member who is ordered to make a permanent change of station is entitled to the travel and transportation allowances outlined in this Chapter from the old permanent duty station to the new permanent duty station. Allowances for permanent change of station travel will be as follows....

1. mileage at the rate of \$0.10 per mile
2. transportation in kind or transportation request(s), plus a per diem allowance
4. when the traveler procures transportation by common carrier at his own expense, he may elect to receive (a) reimbursement for the actual cost of transportation plus a per diem allowance; or (b) mileage at the rate of 0.10 per mile....

Although the Joint Travel Regulations do allow for some alternatives, reimbursement at the rate of \$.10 per mile is used almost exclusively. This is true because reimbursement at \$0.10 per mile is the only allowance which currently can be granted those members of the Armed Forces who drive private automobiles to their new duty station. This allowance is intended to cover the average cost of transportation, subsistence costs, lodging, and other incidental expenses directly related to travel. While civilian government employees also have a mileage rate, theirs is intended to cover only the cost of transportation.

Prior to the passage of the Career Compensation Act of 1949, uniformities in granting travel entitlements among members of the Uniformed Services were few. Each branch of the service and, at times, different segments of the same service, had differing regulations regarding authorized travel

and transportation allowances. In formulating the provisions of the Career Compensation Act, Congress indicated the desire that the regulations issued be uniform throughout the services. The Department of Defense, in response to Congress' wishes, issued a charter forming the Per Diem, Travel and Transportation Allowance Committee. In 1964, DOD Directive 5154.20 served as an addendum to the charter granting the committee the responsibility for issuing uniform regulations for DOD civilian personnel regarding per diem, travel, and transportation allowances [65,1-2].

The basic responsibility of the Committee is to prescribe joint, uniform regulations to implement the authority of legislation pertaining to travel and transportation entitlements. A major function of the Committee is to maintain the currency of the Joint Travel Regulations. In fulfilling its responsibilities, the Committee operates under three basic principles:

1. Fix allowances so that they approximate necessary authorized expenses.
2. Provide equivalent entitlements to military and civilian personnel when travel requirements are substantially the same.
3. Assure that the military members and DOD civilian personnel are neither financially rewarded nor penalized as a result of travel and temporary duty assignments [65,1-2].

B. CORPORATE TRENDS IN TRAVEL ALLOWANCES

As previously mentioned, the mileage between duty points has been the common denominator for military travel entitlements throughout the country's history. Since 1922, this rate has

been either \$.08 or \$.10 per mile. While military entitlements have remained virtually constant over the years, the policies have changed dramatically in the private sector.

During the industrial surge following World War II, new plants and factories opened throughout the country. At the same time, the large numbers of returning veterans made competition for all jobs keen. During this period corporations offered only limited assistance to its employees. Transfers were considered by the employee to be a burden which had to be accepted to maintain employment. Often the transfer involved a promotion and an increase in salary.

This attitude fostered the policy that the employee must move and he should share in the cost of the move. As a result, most corporations had no formal policy concerning transfer allowances, and those that did, provided only the minimal essentials, i.e., the movement of household goods and transportation of the employee to the new location [21,17].

More extensive coverage of relocation policies began in the late sixties. Increasingly higher rates of inflation coupled with heightened competition among corporations for key management talent caused dramatic changes in corporate relocation policies. Changes in the social attitudes of the country and corresponding congressional awareness in corporate activities were additional factors which dictated a more liberal attitude toward all employee benefits [21,17].

In particular, the trend in relocation policy has followed a path of extended reimbursement coverage for transferring

employees. In the 1960's virtually all corporations started covering the expenses directly related to the move. Usually included in this category were househunting trips, family travel to the new location, temporary interim living expenses, and broker and legal fees associated with the sale of a home.

Corporations further extended their policies by providing an allowance to transferees to cover miscellaneous expenses. Today more than 85 percent of the nation's major corporations provide this allowance [57,8]. Among the costs to be covered by the allowance were disconnecting and reconnecting appliances and utilities, registering the car in a new state, the cost of a new driver's license, and altering carpets and drapes.

Often an employee being transferred could not complete the purchase of a home at the new work location until he had sold his old home. To alleviate this problem, some corporations initiated an "equity bridge" loan and payment of the costs of arranging temporary external financing. Additionally, several transferees ended up owning two homes simultaneously. As a result, an increasing number of companies have adopted plans to finance the costs of carrying one of the homes.

During the 1970's, further sharp increases in mortgage rates were experienced. Families being transferred found themselves giving up a \$20,000, 6 percent mortgaged home and having to purchase homes for \$40,000-\$50,000 at 8.5 percent. Today the average price of a home in the United States is approximately \$78,000 and interest rates are in the two digit category [43]. The difference in mortgage payments often causes the equivalent

of a no-promotion or small promotion move. The result of this phenomenon is that some firms have incorporated mortgage differential allowances and cost of living subsidies in their relocation policies [40].

The dollar figure associated with the transferring of an individual is a considerable sum. Some corporations spend more than \$10 million a year on relocating personnel. Industry as a whole spends more than one billion dollars annually.

"In 1978 the average cost of transferring a homeowner was \$12,787, up 9 percent from the 1977 average cost of \$11,739 and 22 percent over the \$10,444 average cost reported in 1976" [23,1]. There has been a 64 percent increase since 1973 when the cost of relocating a homeowner was \$7,800 [23,1]. Although some of the increase is attributable to the escalating inflation rate, a substantial part is a result of the increased coverage of expenses and allowances granted by corporations.

III. MILITARY POLICY - PERMANENT CHANGE OF STATION ENTITLEMENTS

Members of the United States military are entitled to be reimbursed for expenses incurred during a permanent change of station move. The limits are set forth in Title 37 of the United States Code as implemented in the Joint Travel Regulations, Volume One. This chapter considers reimbursement policy for travel expenses, real estate expenses, shipment of household goods, temporary storage of household goods, temporary lodging allowance, miscellaneous expenses, and overseas transfers. These seven reimbursement areas are also discussed in Chapter IV (Civil Service Policy) and Chapter V (Corporate Policy).

A. RELOCATION TRAVEL EXPENSES

1. Employee

The law currently grants an allowance for transportation to members of the uniformed services for permanent change of station moves. Title 37 permits the travel allowance to be either i) a flat mileage rate, currently \$.10, or ii) reimbursement for transportation in kind plus a per diem rate, or iii) the payment of a monetary allowance in lieu of transportation plus a per diem rate. In the latter case the monetary allowance cannot exceed \$.07 per mile or a per diem rate of \$35 per day. In designated high cost areas the per diem limit can be raised to \$50.

The transportation allowance is further restricted by established Department of Defense policy. In accordance with Volume I of the Joint Travel Regulations, the option of receiving an allowance in lieu of transportation plus a per diem rate is not allowed. The Joint Travel Regulations restricts the allowance to the flat mileage rate or reimbursement for commercial transportation. If commercial transportation is used, a per diem allowance is granted. Since the majority of military members travel between duty stations in their private automobiles, the flat \$.10 per mile allowance is used almost exclusively [58,3].

According to Title 37, the allowance on a mileage basis is intended to cover the average cost of transportation, cost of subsistence, lodging costs, and other miscellaneous expenses related to the actual travel. When commercial transportation is utilized, the per diem allowance is designed to cover the average cost of subsistence, lodging costs, and incidental travel expenses. Reimbursement for the actual cost of transportation is furnished by the government. The per diem rate is not intended to cover the use of public transportation, such as taxicab or subway, from the old duty station to the carrier terminals, or between terminals when necessitated by a change in carrier, or from the carrier terminal to the new permanent duty station. These expenses are also reimbursed by the government [49,4-34].

2. Dependents

An integral part of the transportation allowance is the reimbursement granted for dependent travel. Section 406 of Title 37 specifies that:

A member of a uniformed service who is ordered to make a change of permanent station is entitled to transportation in kind for his dependents, to reimbursement therefor, or to a monetary allowance in place of that transportation in kind at a rate to be prescribed, but not more than the rate authorized under section 404(d) of this title... [85,674]

Section 404(d) refers to the rates authorized the member of the uniformed services.

As with the member, the allowance is expected to cover the average cost of transportation, including sleeping accommodations, cost of subsistence, lodging and other directly related expenses. Transportation in kind with an appropriate per diem rate can also be used, with the same considerations given the member.

The military member entitled to transportation of dependents is authorized a monetary allowance in lieu of transportation in kind for dependents as shown below:

1. \$.07 per mile for each dependent 12 years of age or over.
2. \$.035 per mile for each dependent 2 years of age or over, but under 12 years of age.
3. There is no provision granted dependents under 2 years of age. [49,7-6]

B. REAL ESTATE EXPENSES

Title 37 and the Joint Travel Regulations make no provisions for reimbursement of any real estate expenses.

C. SHIPMENT OF HOUSEHOLD GOODS

Although not a monetary allowance, the military member and his dependents are authorized the shipment of household goods. With few exceptions, the member is entitled to transportation (including packing, crating and unpacking) of all baggage and household effects. Even though the household goods are shipped by commercial carrier, the member is not required to negotiate his own move. This function is handled by the government through a network of Household Goods offices.

The military member has the option of moving himself. He may rent or borrow a truck [12] and perform the packing and moving personally. If the individual selects this option, he will be reimbursed for the direct expenses he incurs as long as they do not exceed the cost the government would have paid to move the member's household goods [49,8-87].

There are several restrictions associated with household goods shipment. All moving companies prohibit the transport of items such as paint and explosives. The military, through the Joint Travel Regulations, further prohibits the shipping of privately owned motor vehicles, snowmobiles, boats, animals, and liquors. In addition, weight limitations are placed on the amount of household effects that will be shipped. The weight limit varies by the pay grade of the individual being

moved. Generally the pay grade is a function of age. The assumption is that the older an individual is, the greater the quantity of personal effects he will have accumulated.

Military members, who would otherwise be entitled to ship household goods of 1500 pounds or more, are entitled to a house trailer allowance in lieu of transportation of baggage, household goods, and payment of the Dislocation Allowance. The allowance is granted only if the trailer is moved within the continental United States, or within Alaska, or between the continental United States and Alaska. Allowable costs that can be reimbursed are charges for actual transportation, ferry fares, bridge, road and tunnel tolls, pilot (flag) car services, when required, taxes, municipal and state permits, and driver's service charges. The government will cover these charges up to the lowest of the following ceilings:

1. \$.74 per mile.
2. The current average cost for the commercial transportation of a house trailer.
3. The combined cost of transporting the maximum weight allowance of household goods over a like distance for a member of a corresponding pay grade plus the appropriate Dislocation Allowance. [49,10-2]

D. TEMPORARY STORAGE OF HOUSEHOLD GOODS

Frequently it is necessary for a military member reporting to a new permanent duty station to temporarily place his household goods in storage. This might be required due to government quarters not being available or the time necessary to locate suitable accommodations in the civilian market.

Regardless of the underlying cause, a military member is entitled to ninety days of temporary storage at government expense. An additional ninety days of temporary storage can be authorized under extenuating circumstances [49,8-27].

The storage of baggage or household effects on a non-temporary basis may be authorized when it is considered more economical to the United States government. However, the weight of goods stored plus the weight of household effects shipped must not be greater than the weight limitations specified by the member's pay grade [49,8-28].

E. TEMPORARY LODGING ALLOWANCE

The Joint Travel Regulations make no provision for granting a temporary lodging allowance for moves within the continental United States. The allowance is available, however, for overseas moves, as described in Section G of this chapter.

F. MISCELLANEOUS EXPENSES

Military members are granted a Dislocation Allowance. As stated in the Joint Travel Regulations, "The purpose of the Dislocation Allowance is to partially reimburse a member with or without dependents for the expenses incurred in relocating his household upon a permanent change of station..." [49,0-1]. The allowance is designed to help defray the costs associated with closing down one residence and establishing a new one. Some of the expenses included in this category are disconnecting and reconnecting utilities and appliances, drapery alterations

and carpet alteration. The Dislocation Allowance is the equivalent of one month's Basic Allowance for Quarters. Since the Dislocation Allowance is directly linked to the quarters allowance, the dollar amount of the entitlement is not fixed, but variable, depending on the member's pay grade. The amount of the allowance ranges from a low of \$92.40 to a high of \$479.10. A member without dependents, moving from government quarters to government quarters, is not entitled to the Dislocation Allowance.

G. OVERSEAS MOVES

The provisions for reimbursement on overseas moves are similar to the laws and regulations applied to moves within the continental United States. Specifically, Title 37 makes no differentiation other than authorizing the Service Secretaries concerned to disregard the statutes of the law when paying per diem to the member traveling outside the continental United States. The rate of per diem is set so as to adequately cover the member's expenses for quarters, subsistence, and other necessary incidentals. This caveat allows the services to grant a temporary lodging allowance for members reporting to, or detaching from, overseas duty stations. The allowance is authorized for sixty days while awaiting permanent accommodations, or for ten days when required to vacate government quarters prior to detachment [85,673].

For overseas moves, travel reimbursement is paid on the mileage from the old duty station to the port of embarkation

serving the new duty station and from the port of debarkation to the new duty station. In the case of the member who chooses, and is authorized to perform transoceanic travel in a privately owned conveyance, mileage will be computed from the old to the new duty station and the member will be reimbursed at the rate previously established for moves within the continental United States. In addition, the Joint Travel Regulations authorize the shipment of one privately owned motor vehicle, provided the vehicle is delivered to the port of embarkation [49,11-1].

IV. CIVIL SERVICE POLICY - PERMANENT CHANGE OF STATION ENTITLEMENTS

Civilian employees of the United States Government are also entitled to be reimbursed for expenses incurred during a permanent change of station move. The governing laws are set forth in Title 5 of the United States Code and the current policy derived from these laws is implemented through the Joint Travel Regulations, Volume Two.

A. RELOCATION TRAVEL EXPENSES

1. Mileage Allowance

The civil service employee is entitled to a mileage allowance while making a permanent change of station move. The mileage rate allowed is dependent on the number of passengers in the automobile: employee alone, \$.08 per mile; with one dependent, \$.10 per mile; with two dependents, \$.12 per mile; with three or more dependents, \$.15 per mile [50,4-42]. These rates apply to only one automobile unless the employee can show that the use of more than one is advantageous to the government. If more than one automobile is authorized, the above rates will apply to all vehicles. In addition to the mileage rates, other allowable expenses include ferry fares, bridge, road, and tunnel tolls.

2. Per Diem Allowance

The employee and his dependents are entitled to a per diem allowance during the actual transfer [50,7-8]. The

employee is entitled to full per diem, not to exceed \$35 per day; the spouse and any dependent twelve years of age or older is entitled to three-fourths of the employee's rate, and each dependent under twelve years of age is entitled to one-half of the employee's per diem rate [50,4-165].

B. REAL ESTATE EXPENSES

The entitlements granted a civil service employee include the expenses involved in the sale and purchase of a permanent residence. Included as a valid expense is a househunting trip. In most cases, the employee is entitled to a round trip, not to exceed six days, to the location of his new assignment for the purpose of arranging permanent accommodations. The employee, his spouse, or both may make the trip; however, the employee must make it prior to his reporting to the new duty station. If the spouse makes the trip instead of the employee, the trip may occur at any time prior to the relocation of the family. However, the trip must occur within two years from the date the employee was transferred.

The purpose of the househunting trip is to save government funds. Usually the househunting trip is less expensive than the costs of reimbursing the employee for an extended period of residing in temporary quarters. It is possible that the employee will be assigned to his new station for a period of temporary duty prior to his actual transfer. This should obviate the necessity of either a househunting trip or a temporary lodging allowance. The househunting trip is not automatic

and is carefully considered for each individual move. There are specific instances when the househunting trip is not authorized:

1. When government or pre-arranged quarters at the new location will be provided.
2. When either the new or old duty station, or both, are located outside the continental United States.
3. When the distance between the new and old duty stations is less than 75 miles.
4. When new appointees are selected for "manpower shortage positions."
5. To employees authorized a permanent change of station primarily for training.
6. When returning from an overseas assignment for the purpose of separation. [50,4-42,43]

The mode of transportation used for this trip is generally expected to be a common carrier because it is normally the least costly, most expeditious, and should result in the most efficient use of energy resources. However, if shown to be more advantageous to the government, travel by privately owned automobile can be authorized. The mileage and per diem rates allowed for this trip are the same as for the actual travel performed during the move, however they are only applicable to the employee and spouse.

If, as a result of a permanent change of station move, an employee sells his current residence, purchases a new residence, or must settle an unexpired lease involving his residence or lot on which a mobile home used as his residence

was located, the employee is entitled to be reimbursed for expenses incurred. Reimbursable expenses include:

1. Broker's fee or real estate commission paid for services in selling a residence.
2. Costs of newspaper, bulletin board, multiple-listing services, or other advertising for sale of the residence.
3. Customary costs for appraisal.
4. Costs of searching title, preparing abstract, and legal fees for a title opinion, or where customarily furnished by the seller, the cost of a title insurance policy.
5. Costs of preparing conveyances, other instruments, and contracts.
6. Notary fees and recording fees.
7. Costs of making surveys, preparing drawings or plans when required for legal or financing purposes.
8. FHA or VA fee for loan application.
9. Costs of preparing credit reports.
10. Mortgage and transfer taxes.
11. State revenue stamps.
12. Prepayment mortgage charges where specifically required by the terms of the mortgage.
13. Other incidental charges customarily paid by the seller at the old duty station or if customarily paid by the purchaser at the new duty station. [50,14-23]

The expenses involved in the sale of a residence are reimbursable up to a maximum of 10 percent of the sale price or \$8,000, whichever is smaller. The reimbursement involved with the purchase of a new residence is 5 percent of the purchase price or \$4,000, whichever is less [50,14-3].

The expenses incurred by the employee in order to settle an unexpired lease which include the broker's fees for obtaining a sublease or charges for advertising an unexpired lease are also reimbursable [50,14-3].

C. SHIPMENT OF HOUSEHOLD GOODS

The weight limits imposed on household goods shipments are not a function of pay grade or length of time employed. The maximum weight allowances are the same for all employees with the distinction that employees with dependents are allowed 11,000 pounds and employees without dependents are allowed 7,500 pounds. The actual weight of the household goods is determined by how the goods are shipped. If uncrated, such as in a moving van, the net weight is that shown on the bill of lading. If crated, the net weight is computed as 60 percent of the gross weight. In containerized shipments the net weight is 85 percent of the gross weight. And, if no method is available to weigh the household goods, a constructive weight is computed using seven pounds per cubic foot of properly loaded van space. The 7,500 pound limit for employees without dependents may be increased to 11,000 pounds if the former limit would cause undue hardship to the employee. Justification for this hardship includes accumulation of household goods as the head of a larger household who no longer supports dependents by reason of divorce, legal separation, death of spouse, loss of dependent by death or reaching the age of twenty-one, or the acquisition of household goods prior to an impending marriage [50,8-1,2].

The employee may move a mobile home to his new duty station if travel is to be performed within the continental United States and Alaska or through Canada between the continental United States and Alaska. The decision to move a mobile home is in lieu of a household goods shipment and the following expenses are reimbursable:

1. The carrier's charges for actual transportation in an amount not to exceed the Interstate Commerce Commission tariff's applicable for a mobile home of the size and type, and the distance transported.
2. Ferry fares, bridge, road, and tunnel tolls, taxes, charges or fees fixed by a state or municipal authority and carrier's service charge.
3. Charges for pilot (flag) car if required. [50,10-1]

The employee can choose to move the mobile home with his own vehicle, in which case he will be reimbursed at a rate of \$.11 per mile in addition to the mileage rate for the privately owned automobile. [50,10-1,2]

D. TEMPORARY STORAGE OF HOUSEHOLD GOODS

As in the case of the military member, a transfer to a new duty station is accompanied by various delays in moving into permanent quarters. Temporary storage of household goods, not in excess of the allowable weight, is authorized for a period not to exceed sixty days. Temporary storage may be at the location of the old duty station, the new duty station, or enroute, or any combination thereof [50, 8-2].

E. TEMPORARY LODGING ALLOWANCE

When an employee is required to occupy temporary quarters as a result of a transfer to a new duty station, a temporary quarters subsistence allowance is authorized. Payment of this allowance serves to defray the meals, lodging, and incidental expenses incurred by the employee and his dependents prior to moving into their permanent residence. The temporary quarters subsistence allowance is authorized when the new duty station is located in the United States, the Commonwealth of Puerto Rico, or the Canal Zone. The allowance for temporary quarters is authorized for the period of occupancy but not to exceed thirty days. If the employee is being transferred to or from Alaska, Hawaii, the territories and possessions, the Commonwealth of Puerto Rico, or the Canal Zone, an additional period not to exceed thirty days can be granted. Normally, the period of occupancy of temporary quarters should be much less than the maximum or should not be required at all if the employee availed himself of the househunting trip or was sent to the new duty station for a period of temporary duty prior to his actual transfer. The temporary quarters subsistence allowance is not authorized under the following conditions:

1. A new appointee assigned to a first duty station.
2. An employee transferred to a new duty station outside of the United States, the Commonwealth of Puerto Rico, and the Canal Zone.
3. An employee returning for separation from a post outside the continental United States.

4. An employee authorized a permanent change of station primarily for training.
5. An employee performing renewal agreement travel. [50,13-3]

When authorized, the temporary quarters subsistence allowance is either the actual subsistence expenses incurred or the maximum allowable amount, whichever is less. The maximum allowable amount is computed in accordance with the following schedule:

1. First ten days
Employee - 75 percent of maximum allowable per diem for the locality in which the temporary quarters are located.

Each dependent - 50 percent of maximum allowable per diem for the locality in which the temporary quarters are located.
2. Second ten days
Employee - 50 percent of maximum allowable per diem for the locality in which the temporary quarters are located.

Each dependent - 33 1/3 percent of maximum allowable per diem for the locality in which the temporary quarters are located.
3. Third ten days
Employee - 37 1/2 percent of maximum allowable per diem for the locality in which the temporary quarters are located.

Each dependent - 25 percent of maximum allowable per diem for the locality in which the temporary quarters are located.
[50,13-3,4]

F. MISCELLANEOUS EXPENSES

The miscellaneous expense allowance is for the purpose of defraying contingent costs associated with the relocation of a residence. Examples of the types of costs that are reimbursable are:

1. Disconnecting and connecting appliances, equipment and utilities and the cost of converting appliances for operation on available utilities.
2. Cutting and fitting rugs, draperies and curtains moved from the old to the new residence.
3. Utility fees or deposits that are not offset by eventual refunds.
4. Forfeiture losses on medical, dental, and food locker contracts that are not transferable.
5. Automobile registration, driver's license and use taxes imposed when bringing automobiles into some jurisdictions.
6. Unblocking, blocking, and related expenses in connection with relocating a mobile home but excluding the transportation expenses.
7. Rental agent fees customarily charged for securing housing in foreign countries. [50,9-1]

The minimum allowance may be paid without being supported by receipts or itemized statements of the expenses being reimbursed. An employee without dependents is entitled to \$100 or the equivalent of one week's basic salary rate, whichever is the lesser amount and an employee with dependents is entitled to \$200 or the equivalent of two weeks' basic salary rate, whichever is the lesser amount. All claims that exceed the \$100 or \$200 minimums must be supported with records and receipts [50,9-2].

G. OVERSEAS MOVES

Employees transferred to or from a duty station outside the United States, the Commonwealth of Puerto Rico, or the

Canal Zone receive all the entitlements of an employee making a move within these areas with the exception of the temporary quarters subsistence allowance, the house hunting trip, and real estate expenses. There is no authorization for a temporary quarters subsistence allowance for temporary living expenses in a foreign country. Also, there is no provision for a house hunting trip or real estate expenses when the employee is transferred either to or from a foreign country.

V. CORPORATE POLICY - PERMANENT CHANGE
OF STATION ENTITLEMENTS

Many surveys have been made to determine the extent of corporate compensation to employees going to new jobs in different geographical locations. The most notable of the surveys are those conducted by the Employee Relocation Council and Merrill Lynch Relocation Management Incorporated. These companies conduct annual studies on the assistance granted employees who are transferred. Other companies, such as the American Management Society and The Conference Board, periodically conduct surveys on this topic.

Most of the data used in the chapter is a collation of information from the surveys conducted by the Employee Relocation Council and Merrill Lynch. These were chosen because they are the most recent and cover a large, diversified segment of the private sector. The results of the Employee Relocation Council survey are based on the response to a mailed survey by 371 member companies. Companies ranged from international giants such as Exxon Oil Co., and Ford Motor Co., to regionalized companies like Michigan Bell Telephone. Merrill Lynch's study consisted of over 600 phone interviews with companies from the Fortune 1000 list of industrial companies, plus Fortune's Top 50 list of non-industrial firms.

A breakdown of the types of companies interviewed by Merrill Lynch are found in Table 1. Both surveys incorporated data from 1978. The surveys by all the organizations mentioned

TABLE 1
CATEGORIES OF COMPANIES: MERRILL LYNCH SURVEY

INDUSTRY GROUP	NUMBER OF INTERVIEWS		
	1978	1977	1976
Petroleum & Gas	24	33	32
Food Preparation and Distribution	54	52	48
Metal Manufacturing	23	37	23
Mining	10	5	5
Industrial Machinery and Equipment	47	90	48
Banking, Finance, Accounting, and Insurance	89	97	93
Retailing and Wholesaling	15	18	15
Transportation	46	37	36
Public Utilities	35	36	24
Aeronautics, Space, and Electronics	8	39	26
Computers, Calculators, and Business Machines	12	10	13
Chemicals and Plastics	38	44	32
Pharmaceuticals and Cosmetics	16	22	23
Hardware, Appliances and Housewares	28	8	13
Wood and Paper Milling and Manuf.	28	27	21
Rubber and Rubber Products	7	6	8
Textiles, Clothing, and Carpeting	15	27	22
Publishing and Printing	19	17	12
Automotive Manufacturing	21	15	13
All Others	68	66	94
Total Firms Interviewed	603	686	601

were designed to identify the types of compensation corporations provide to employees transferred on a permanent basis, similar to the permanent change of station move found in the military.

As the history of corporate compensation practices indicated, the trend has been toward extensive reimbursement for costs incurred in relocating. A spokesman for Aluminum Company of America stated, "We place our people where they are needed, and where they do us the most good. The expense is not a factor" [87,56]. Similar sentiments were expressed by a representative for a major steel firm. "If the man is right for the job, expense would never be a factor" [87,56].

Transfer and relocation policies in private industry vary widely in the amount of compensation given, and the entitlements for which compensation is paid. There are, however, sufficient similarities within the private sector and the Department of Defense for comparative analysis. This chapter divides the reimbursements into seven specific areas to facilitate comparison with military and DoD civilian entitlements discussed in previous chapters. The percentages of companies surveyed which provide reimbursement in these areas are displayed in Table 2 on page 44. Descriptions of the seven reimbursement areas are provided in the remainder of this chapter.

A. RELOCATION TRAVEL EXPENSES

According to a report published by the Conference Board [34,20], the mode of transportation was generally selected by

TABLE 2
SURVEYS OF CORPORATE RELOCATION POLICIES

Summary					
		ERC ² 78	ML ³ 78	ATLAS ⁴ 78	AMS ⁵ 77
					CB ⁶ 77
A.	Relocation Travel Expense				
	Mileage + Per Diem Allowance	98 ¹			94
B.	Real Estate Expenses				
	Househunting Trip	98	95		89
	Home Disposal Assist.	95	94		83
	Brokerage Commission	93			100
	Other Normal Closing Costs (Appraisal, Legal)	75			
	Guarantee Against Loss Below Fair Market Value		41		31
	Guarantee Against Loss Below Investment	18	19		
	Company Will Purchase Home	13	15		
	Relocation Firm Will Purchase Home	42	45		43
	Duplicate Home Carrying Costs	64	69		49
	Mortgage Discount Points		48		35
	Mortgage Prepayment Penalty		69		50
	Home Purchase Assistance		74		77
	Equity Bridge Loans	75			

	ERC ² 78	ML ³ 78	ATLAS ⁴ 78	AMS ⁵ 77	CB ⁶ 77
Closing Costs	74	63			
Mortgage Rate Differential	30	15			
Legal Fees	74	61			45
Title Costs	74	61			45
C. Shipment of Household Goods	99	98		96	100
D. Temporary Storage of Household Goods			82	64	
E. Temporary Living Allow- ance					
Living Expenses Old Residence	61				
Living Expenses New Residence	98			94	85
Ave. No. Days Covered	35 days				
No limitations on Expenses	95				
F. Miscellaneous Expenses		87			
G. Overseas					
Foreign Service Premium	70				
Cost of Living Allow- ance	>50				
Reimburse for loss on sale of automobile	70				

- Notes: 1. Numbers represent the percentage of companies surveyed which offer the reimbursement
2. ERC = Employee Relocation Council Surveys

3. ML = Merrill Lynch Survey
4. Atlas = Atlas Van Lines Survey
5. AMS = American Management Society Survey
6. CB = The Conference Board Survey
7. Blank spots under each survey indicate data was not available.

the employee. Some companies preferred their employees to drive private automobiles and others imposed restrictions. For example, if the transferee desires commercial transportation, he is required to use standard fare. If the employee chooses to use his private automobile, he is generally provided a mileage allowance and a daily per diem allowance.

The Employee Relocation Council survey showed 98 percent of the companies provided a mileage allowance, with the average reimbursement rate being seventeen cents per mile. In an interview with Mr. Cris Collie, Executive Vice President of the Employee Relocation Council, he indicated that this average was sure to increase in 1979 because of the rapid rise in the cost of gasoline. Of particular note was the rapid increases reported in recent Employee Relocation Council surveys. The \$.17 per mile represents a substantial increase over the 1976 average of \$.137 a mile and 42 percent rise from the \$.108 per mile reported in 1974. A special concern is the question of equitable reimbursement to those entitled to mileage allowance.

The mileage allowance is intended to cover the cost of transportation from the old residence to the new residence. Generally, the companies relocation policy stated that reimbursement was based upon the most direct or practical route. Consideration was given to family safety in terms of miles covered per day, usually 300-400 miles, and circumstances such as weather [34,21]. In most cases firms paid the rate for more than one automobile driven to the new location.

Expenses such as lodging and meals were covered by different programs depending on the company. Pan American World Airways provided the option of being reimbursed for the actual costs, as substantiated by receipt, or a per diem rate that was based on the cities and areas travelled [63,11-12]. Dupont Chemical only offers reimbursement for actual expenses incurred [22,28].

In a study conducted by The Conference Board [34] in 1977, variations in the per diem schedule ranged from twenty-five dollars per day per adult and ten dollars per day for a dependent under twelve to a fixed rate of forty-five dollars a day for an employee with family. According to Mr. Collie [40], the per diem rate has increased in the past two years. The major factor influencing this rise has been the higher inflation rates. Further evidence to suggest this is true is that in 46 of the 49 company policies evaluated by The Conference Board, corporations paid all transportation expenses for employees and their families. Included as expenses were the actual cost of transportation, loding, meals, baggage, communications, taxis and tips.

B. REAL ESTATE EXPENSES

When employees are transferred, the greatest problems and the potential for greatest losses are encountered in the sale and purchase of housing. Problems begin when the individual must sell his home, perhaps at a loss or below fair market value, and attempt to purchase a new home; often at a premium

because of the time element. If the transferee can not sell his old home quickly, he may be forced to pay two mortgages simultaneously. If required to rent while looking for a new home, it may be necessary for him to sign a restrictive lease [47,21].

A survey conducted by Atlas Van Lines Incorporated [6] showed that employees, in increasing numbers, were reluctant to accept positions where relocation was necessary. The survey reported that 31 percent of the responding firms witnessed an increase in the number of people who declined to relocate. Seventy-seven percent of the firms questioned had at least one employee refuse a job change that required moving. Major reasons for refusals were high mortgage rate differentials and real estate expenses associated with selling and buying homes [86,57].

In order to reduce the reluctance of employees to relocate, companies are offering greater compensation. In 1975 The Conference Board undertook a survey of large corporations to study the companies' response to employees' housing needs. Information was gathered from the country's largest manufacturing firms (Fortune's 1000 Industrials), insurance companies with premium income of at least ten million dollars and bank's with at least 100 million dollars in deposits. The results showed that three quarters of the large corporations provided some form of housing assistance [88,1].

More recent studies have shown the percentage of companies which provide some real estate assistance has increased to

over 90 percent [57,5]. Large employers are the major focus of these studies because they are most apt to have multiple facilities, therefore, necessitating the transferring of employees. A second reason large corporations are studied is that they tend to set the pace for the business community. What they have chosen to do to solve problems is likely to be what most employers must do in the future to remain competitive.

Real estate assistance granted by most companies is offered to help defray the costs associated with home disposal and purchase of a new home, to make available the money to conduct the transaction, and to reimburse losses sustained by untimely sales. To meet these goals, the companies adopted a vast array of programs, few of which are exactly alike. A brief discussion of some of the most common forms of compensation follow, and are included in Table 2, Part B.

Although not directly related to the disposal of a home or the purchase of a new residence, househunting trips are an integral factor in providing for a smooth and rapid resettlement of transferees. Almost universally - 95 percent in the Merrill Lynch survey and 98 percent in the Employee Relocation Council survey - companies cover the cost of househunting trips. Respondents to the Merrill Lynch survey allowed one trip in 47 percent of the cases and 43 percent of the firms allowed two trips. Trips ranged from three to seven days. The average length trip in the Employee Relocation Council survey was 5.5 days. The most frequently mentioned combination

offered one round trip of 5-7 days for the employee and spouse, meals and lodging for both and childcare fees [25,1].

Companies are more apt to give assistance in the disposal of the employees' homes than in the expenses involved in the purchase of a new residence. According to Merrill Lynch's study, only 6 percent of the companies surveyed offered the employee no assistance in the selling of their home. Assistance programs in home disposal fall into four categories: reimbursement for selling costs, guarantee against loss, in-house purchase of the employee's home, and third party programs.

Merrill Lynch found that 45 percent of the responding firms made use of third party programs. The second most common program was for the individual to arrange the sale and be reimbursed for some or all the expenses. Included in this section were those companies which guarantee against any loss suffered in the sale of the house. Another 15 percent of the firms offered to purchase the employee's home.

The program requiring the least capital outlay for the firm was the direct reimbursement for selling costs, 8.5 percent of the residence's selling price. For the guarantee-against-loss program, the average cost was 11.1 percent of the fair market price, the in-house plan was 11.6 percent and the use of third parties averaged 14.4 percent of the fair market price [25,3].

One expense which was covered by virtually all companies was the brokerage commission. Whether the expense was covered by an allowance to the employee or covered in a contract with

third parties, greater than 90 percent of the firms, in all surveys researched, covered this cost. Policies using direct reimbursement programs ranged from covering just brokerage fees to those that included mortgage prepayment penalties, mortgage discounting and duplicate housing costs [34,31].

In the other three categories of home disposal plans, the coverage offered was based on the fair market value of the home. Fair market value is the highest price that a well informed buyer would pay and a well informed seller would accept if the property, as is, was immediately exposed to the market for a reasonable period of time, with both parties acting free of compulsion or stress, and with all rights and benefits inherent to, or attributable to, the property included in said value [34,31]. Generally the fair market value is determined through appraisals of the property.

Following the determination of the fair market value, firms providing for the outright purchase of the employee's home make an offer for that amount. The transferee then has a prescribed time limit, usually thirty days, to accept or reject the bid. If the offer is rejected, the individual accepts the risks of selling without reimbursement for expenses. In guarantee-against-loss programs the procedure is much the same. The difference being the individual makes his own arrangements and disposes of the house and the company reimburses the difference between the selling price and the fair market value.

In third party arrangements the company contracts with a realtor or relocation firm for specific services it desires.

A representative sample of such a plan is:

The company will pay the full cost of the following services performed by the (realty) company. Purchase the employee's home immediately and guarantee the employee full market value, plus the net excess proceeds if the property sells above this base. Provide for employee participation in establishing the asking price and acceptance of bids. Cost of appraisals, broker's fees and maintenance of home are included under the Transfer Plan and paid for by the company.

Provide the employee with an equity advance as needed to purchase a new home before moving and make full payment of his equity when he moves. [34,35]

The Employee Relocation Council found that in 1978 over 73 percent of the firms responding guaranteed the transferee the appraisal value of his home [25,2].

Reimbursement for expenses resulting from the purchase of a new home have not been as liberal as the benefits granted in the sale of the old home. Assistance beyond providing information on local schools and transportation systems consisted of equity advances for down payments, reimbursement of closing costs and allowances for mortgage rate differentials. In a survey by The Conference Board, 77 percent of the firms questioned provided some form of monetary assistance.

The number of companies that provided direct loans to transferees was slightly more than 75 percent, up from 69 percent which followed such a policy in 1976. Company loans were mostly short term, interest-free "bridge loans," made in

an amount equal to the employee's equity in his old home. Equity generally was definbd to be the balance remaining when the amount of unpaid mortgage, other liens and prorated interest and taxes were subtracted from the fair market value. Loans were usually secured by a personal note payable on demand following the sale of the old residence [34,36].

Companies covering the closing costs charged to a buyer ranged between 55 and 75 percent depending on the survey used. However, in all cases this represented a substantial rise over the results obtained in surveys conducted in 1975. In the Merrill Lynch survey, increases in the percentage of companies covering certain costs were as high as 24. The Employee Relocation Council Survey found a 12 percent increase in the number of companies providing this form of compensation.

Mortgage rate differentials are the type of compensation currently experiencing the fastest growth rate. According to Mr. Collie, this benefit will be reviewed and updated by more companies in the 1979-1980 time frame than any other form of compensation. This is true because this type of compensation is designed to battle inflationary effects, in this instance spiraling mortgage rates. The most common formula used to compute the allowance is the old mortgage multiplied by the difference in mortgage interest rates multiplied by three. For example, if the transferee held a \$30,000, 8 percent mortgage and the new interest rate was to be 12 percent, the individual would receive 3,600 dollars from the company [40].

Reimbursement policies for renters have not been as extensive as those provided the homeowner. Generally companies only covered lease termination penalties. Ninety-eight percent of the firms surveyed covered this expense. Less than 40 percent of the companies responding covered finders fees for a new apartment, security deposits, or legal fees. In all these areas, however, the number of organizations covering the costs are up significantly from 1977 [57,8].

C. SHIPMENT OF HOUSEHOLD GOODS

One of the most basic and earliest recognized expenses associated with a move is the cost of packing, transporting and unpacking the furniture and personal effects of the employee. Since the expense is fully deductible according to Internal Revenue Service law most companies have very liberal policies. One hundred percent of the companies studied by The Conference Board in 1977 included provisions to cover fully all direct shipping expenses [34,23].

Other studies indicated the same widesweeping coverage, as shown in Table 2. Merrill Lynch indicated 98 percent of the companies provide full coverage and the Employee Relocation Council survey resulted in over 99 percent of their firms provided similar reimbursement. The following excerpt from a machine tools manufacturer is typical: "The company will pay for the movement of household goods. This includes packing and unpacking, disconnecting and connecting of normal appliances, transportation of household goods, and insurance

while in transit" [34,23]. A small percentage of companies, 18 percent, restrict the amount of household goods they will pay for by imposing weight limitations. Others will restrict types of goods such as boats or some high value items [6,1].

An item that a large number of firms cover is the cost of shipping employee automobiles. The Employee Relocation Council survey indicated that 85% of the responding companies will ship the employee's primary auto, if not driven to the new location; and 65 percent had policies providing for the shipment of additional cars [25,1].

Table 3, extracted from the Atlas Van Lines 12th Annual Survey of Corporate Moving Practices, delineates some of the unusual items companies are willing to reimburse for the cost of shipping. The numbers represent the percentage of 434 respondents that provide coverage.

TABLE 3
SHIPPING POLICY FOR UNUSUAL ITEMS

	<u>1979</u>	<u>1978</u>	<u>1977</u>	<u>1976</u>
Move a second auto	61.6	61.2	52.3	59.0
Move a third auto	11.1	11.1	10.0	12.0
Move a boat	34.1	32.2	32.2	33.0
Move collections of recognized high value objects such as paintings	70.4	71.0	69.8	67.0
Move pets	55.3	48.8	49.5	45.0
Move other items not specified (motorcycles, mobile homes, pool tables)	74.5	76.6	76.5	34.0

D. TEMPORARY STORAGE OF HOUSEHOLD GOODS

Eighty-two percent of the companies surveyed by Atlas Van Lines allowed for temporary storage of household goods. While paying for storage is a common practice, the majority of companies restrict the time they pay for this service. This period is generally limited to a maximum of sixty days.

E. TEMPORARY LODGING ALLOWANCE

From the time the transferee starts to work at his new location until a new residence is established, he is usually on a transitional living expense allowance. Interim expenses associated with this period of the move include motel room charges, meals, tips, taxi fares, telephone, laundry and dry cleaning and the boarding of any pets. The Employee Relocation Council found that 98 percent of the firms included in their survey cover these expenses at the new location and 61 percent of the respondents offer similar compensation at the old residence [25,1].

According to studies conducted by The Conference Board and the American Management Society, between 85 and 95 percent of the firms surveyed covered temporary living expenses for the employee. Although some firms treated the employee and his family equally, more often it was found that coverage was not as extensive for family members. In the American Management Society study, 89 percent provided from one to six months of living expense to the employee and 61 percent of the firms had similar benefits for dependents. The Conference

Board found a greater disparity in the compensation granted the employee and that for his family. In over half of the organizations evaluated, dependents were allowed fewer days than the employee. The rationale for the disparity was the family was not expected to accompany the employee to the new location before a place of abode was acquired.

F. MISCELLANEOUS EXPENSES

Eighty-seven percent of the companies responding to the Merrill Lynch survey provided an allowance to cover the numerous minor expenses incidental to moving. Such costs include:

- Adjustment of television sets
- Fess for connection of utilities
- Alterations and cleaning of curtains,
draperies, and carpeting
- Unused portions of fees, memberships, etc.
- Automobile registration, sales tax, and
driver's license
- House cleaning
- Validation of wills

Although the rate and method of reimbursement varies, the majority of companies have established the allowance as a function of the employee's salary. Most common was one month's post relocation salary with no requirement for receipts and documentation.

G. OVERSEAS MOVES

The cost of transferring an individual to an overseas subsidiary can be staggering. In a recent survey conducted by McKinsey and Company Inc., of fourteen multinational corporations, the typical annual incremental cost for a United States expatriate ranged from \$50,000 in London to \$165,000 in Riyadh. These figures were developed using an individual with a base salary of \$35,000, married with two children, who has been transferred abroad for three years. Among the companies surveyed, the incremental costs of utilizing United States citizens in their foreign subsidiaries ranged from slightly under 1 percent to more than 10 percent of total corporate aftertax profits [29,245-246].

Compensating the individual was based on the feeling that the expatriate must be offered inducement to go overseas but should not gain or lose financially as a result of the transfer. In addition to the normal domestic compensation concepts (i.e., salary, incentives), the expatriate generally receives a cash incentive to move and various allowances. The allowances cover reimbursement for relocation expenses, itemized reimbursement for specific incremental costs, and tax considerations.

Most companies, 70 percent according to an Employee Relocation Council survey, provided a foreign service premium. This payment was generally given throughout the duration of the individual's stay in the foreign country and was based on the expatriate's base salary. In addition, the majority of firms pay hardship allowances for specific locations [24,1].

Other allowances which remained in effect for the length of time the individual was stationed overseas were reimbursement benefits for designated items such as cost-of-living and taxes. The majority of companies provided a cost-of-living allowance if the local cost of goods and services were greater than the cost of similar commodities and services in the United States. Significant variations in the amount of compensation exists due to differences in what constituted an individual's spendable income and the definition of the cost-of-living index. The taxation policy followed by most companies was to reimburse expatriates for the difference between the taxes required by living abroad and what they would have had to pay in the United States on their U.S. base salary [29,253-254].

If local housing costs exceeded normal U.S. levels, housing allowances were almost universally granted. Similarly, allowances were granted for the employee and family to return to the United States annually, education allowances to send children to school, and some form of compensation for purchasing a new car [29,246].

Reimbursement assistance for direct moving expenses is another segment of the total compensation package for the individual transferred abroad. As in a domestic move, the greatest cost factors involve housing assistance. Nearly 40 percent of the 164 firms responding to the Employee Relocation Council survey discouraged individuals from selling their home in the states. From the same survey 66 percent of the

companies offered some type of financial assistance if the home was not sold. Included in this group was the 40 percent which discouraged the sale of the home. The most common assistance offered was reimbursement of a rental management fee. If the individual elected to sell his residence, virtually all companies provided compensation for home disposal similar to a domestic move [24,1].

In addition to the reimbursements granted for housing, companies typically provided six other benefits. For readily accessible areas companies generally provided a househunting trip for the employee and spouse. Firms also provided household goods shipment and transportation expenses similar to those provided for domestic transfers. A miscellaneous allowance or housefitting allowance was granted by nearly 85% of the firms surveyed. This allowance was to be used to cover incidental expenses incurred. Automobiles generally cannot be shipped due to competitive practices in host countries; therefore, some form of assistance in purchasing a car overseas was included in the compensation package. The final type of assistance rendered is language classes for the employee and his wife, if English is not the native language of the destination country [29,250].

VI. COSTS

This chapter develops expected costs for each of the seven reimbursable areas described in Chapters III, IV, and V (e.g., relocation travel expense, real estate, household goods, temporary storage, temporary living allowance and miscellaneous expense). The costs associated with relocating thousands of individuals each year has become a major factor in the operating expenses of business and government enterprises. Homequity/Homerica Inc., in 1978, conducted a study of 1300 companies found on the Fortune lists and determined the average cost of a homeowner's move to be between \$15,000 and \$20,000 [53,26]. In the same year the Employee Relocation Council cited the average cost of transferring a homeowner to be nearly \$13,000 [23,1]. Most of the major and some of the minor expenses are obvious. Others are obscured, but when all are added, a substantial cost is borne by the individual, his employer, or a combination of the two.

A. RELOCATION TRAVEL EXPENSES

Relocation travel expense includes expenses incurred while actually traveling. These expenses were categorized into the following groups which are described below: lodging, meals, and transportation, by automobile and airplane.

1. Cost of Lodging

The derivation of lodging expense was predicated on the assumption that the transferee was expected to patronize

neither the most expensive nor the least expensive accommodations. The cost of a night's lodging was estimated by calculating an average, thereby recognizing the fact that there sometimes exists a wide range of prices at the same motel/hotel and that prices fluctuate due to seasonal variations.

Random sampling techniques were employed to determine the average daily cost of lodging. Three samples were constructed by referencing publications quoting rates, prepared by Quality Inns [66], Best Western [11], and Holiday Inn [37]. The samples consisted of one hundred motels/hotels from each company. These motel/hotel chains represented a mid-priced accommodation that was available throughout the United States.

Analysis of the data revealed that the average cost for single accommodations was \$25.96 and for double occupancy the average cost was \$31.00. It was found that a family of four, occupying the same room, would cost, on the average, \$37.45 per night. Table 4 provides a summary of the samples taken.

TABLE 4
SUMMARY OF HOTEL RANDOM SAMPLES

	Population size	Sample size	Mean Family (4)	Standard Deviation	Range
Quality Inn	300	100	\$39.30	\$12.10	\$22-\$88
Best Western	2140	100	\$34.91	\$ 5.94	\$20-\$58
Holiday Inn	1400	100	\$38.16	\$ 6.21	\$26-\$58

These costs are low in light of the fact they do not include taxes. For this study it was impossible to incorporate an accurate tax figure because state tax rates vary and some states allow cities to impose additional room taxes. However, from a random sample of 100 motels throughout the United States, an average tax figure of 5.6 percent was obtained. To be a more realistic representation of average lodging cost, a 5.6 percent tax should be included. Applying this rate yielded daily lodging rates of \$27.41 for single accommodation, \$32.74 for two persons, and \$39.55 for a family of four.

2. Cost of Meals

Determining the average cost of meals was similar in approach to the derivation of lodging costs. Once again it was assumed the transferee should patronize neither the most expensive nor least expensive restaurants. Rather he should make use of an average range of eating establishments. To arrive at the average daily meal expenses, data was obtained from Runzheimer and Company, the noted leader in the field of statistically measuring meal costs, and the Department of Agriculture.

Costs extracted from Runzheimer's July 1979 Meal-Lodging Cost Index revealed the average daily meal costs for an adult to be:

Breakfast	\$4.13
Lunch	\$5.03
Dinner	\$10.01

The Runzheimer Index is developed by sampling restaurants in ninety-eight cities throughout the United States. Included in the cost figures are state sales tax and a 15 percent gratuity.

No empirical data was available from the Runzheimer Index that cited added food costs for dependent members of a family. To develop the expected cost of meals for additional family members data from the Department of Agriculture was used. This data cited weekly at home food costs for families to be:

	<u>Cost</u>	<u>% of Adult Male</u>
Male (20-54)	\$18.70	100
Female (20-54)	\$15.20	81
Teenage Male	\$18.00	96
Teenage Female	\$15.20	81
Child (9-11)	\$15.90	85
Child (6-8)	\$12.80	68

No data was available for children under the age of six.

It was assumed that their percentage of adult male cost would be 40 percent.

Applying the percentage of adult male food costs to the Runzheimer cost figures would yield the following daily food costs.

Male (20-54)	\$19.17
Female (20-54)	\$15.53
Teenage Male	\$18.40
Teenage Female	\$15.53

Child (9-11)	\$16.29
Child (6-8)	\$13.04
Child (less than 6)	\$ 7.67

From these figures it is possible to develop daily meal costs for any combination of family members. For instance, a family of four composed of a husband, wife, boy 14, and a girl 7 would have an average daily meal expense of \$66.14. This assumes that a 15 percent gratuity is a just and reasonable expense.

It was recognized that no restaurant offers the food portion variance reflected by these figures. Most establishments offer only a full size portion and a child's plate, thus equating to only two prices and quantities. However, it was felt that over the period of time required to conduct the move the overall costs would average out to these figures. The averaging would be accomplished by the individual ordering a range of meals of differing type, size, and price.

3. Cost of Operating an Automobile

Many automobile owners consider their vehicle costs to be expenditures for gasoline, oil, and repair bills. Closer examination reveals that many other expenses combine to make the cost of driving equal to more than one-fourth of the nation's personal income in 1978 [31]. The cost elements of automobile ownership can be divided into two categories. One group is generally referred to as fixed or ownership costs; the other category is variable or operating costs.

Ownership costs are considered to be annual expenditures which are a function of the type and make of car, where the car is driven, and how it is used. Included in the fixed cost category are insurance, license and registration, and finance charges outstanding. Those expenses which are directly related to the number of miles the automobile is driven are classified as operating costs. These variable costs include depreciation caused by miles driven, gasoline, oil, tires, and servicing.

Although all these expenses represent the total cost of owning and operating an automobile, it has been successfully argued that only operating costs should be considered when determining reimbursement policies for transfers. The reasoning behind the argument is that the individual would own a car regardless of whether he was being transferred. Hence, the majority of corporations and government agencies develop compensation packages which attempt to defray only the operating costs of the automobile. For the purposes of this study this philosophy was followed and only variable costs were developed.

Costs were determined for three classes of automobiles: The standard, the compact, and the subcompact. Categories were established on the basis of the number of cylinders, eight cylinders being standard, six cylinders compact, and four subcompact. In order to develop expenses on a per mile basis, it was necessary to establish a standard mileage figure. For the purpose of this study the life of the automobile was

assumed to be five years and the number of miles driven was assumed to be 58,900. These assumptions were based on studies by the Department of Transportation which calculated that the normal pattern of vehicle life was for a new car to serve as the primary vehicle for five years. During this period the average mileage was found to be 58,900 [54,3-4]. It was reasoned that when an individual conducted a permanent change of station move he would use an automobile which fell into the primary vehicle category and would either sell or ship other cars.

a. Depreciation

Depreciation can be defined as the difference between the purchase price and the resale or trade-in value of an automobile. The cost of depreciation is a function of the age of the automobile, its mechanical and physical condition, and the number of miles it has been driven. To meet the objective of only considering variable costs, it is necessary to consider only the component of depreciation which is caused by the number of miles driven.

According to an American Automobile Association report, depreciation due to excess mileage for a standard car is forty one dollars per thousand miles driven [3,3]. This equates to 4.1 cents per mile. To verify this figure an analysis of data contained in the Kelly Bluebook Auto Market Guide was performed. The "Bluebook" is used by many automobile dealers and lending organizations as a fair representation

of the market value of any type of automobile. The variable depreciation costs were determined using adjustment factors on trade-in value that were based on the mileage driven. The guide provides additions or deductions in varying increments based on mileage. For instance, a 1979 car, driven 28,000 miles, has an adjustment factor downward of 325 dollars. Computing the incremental per mile deductions for the standard size automobile and averaging the results yielded a 3.7 cents per mile variable depreciation rate.

Because this figure was less than the figure obtained from the American Automobile Association, further verification was required. The National Automobile Dealers of American Official Used Car Guide yielded figures closely corresponding to those derived from the analysis of Kelly's adjustment factors. Since both sources used by car dealers to obtain trade-in values produced figures close to 3.7 cents per mile, this amount was used in this study. Similar analysis developed variable depreciation costs of 2.6 cents per mile for the compact and 2.23 cents per mile for the subcompact.

b. Gasoline

Fuel to operate an automobile is a major cost element regardless of the car type and size. Prior to the oil shortage, which occurred in 1973, the price of gasoline had remained stable for over twenty years. Since that time gasoline prices have skyrocketed so that today the average price of a gallon of gas is more than 100 percent greater than what it cost before the oil embargo of 1973. In January of 1980

CBS News reported, that according to Department of Energy sources, the average price of unleaded gasoline in the United States was \$1.04. Estimates have this figure going as high as \$2.00 a gallon before the end of the year [15].

Although regular gasoline is cheaper, it was rejected as a representative figure. Rejection was based on the fact that a relatively small percentage of vehicles sold in recent years can legally operate using regular gasoline. A further consideration was that unleaded gasoline is the mid-priced gas with high octane or supreme gasoline being more expensive and regular gas being a few cents cheaper. For the purposes of this study both the \$1.04 per gallon and the \$2.00 per gallon figures were evaluated.

The Department of Transportation, in various studies evaluating automobile costs, uses gasoline consumption rates of fifteen miles per gallon for the standard automobile, twenty-one miles per gallon for the compact and twenty-nine miles per gallon for the subcompact [54,6]. These rates were considered reasonable and were used. As a result, the per mile cost of gasoline using the \$1.04 per gallon figure was 6.93 cents for the standard size, 4.95 cents for the compact and 3.59 cents for the subcompact. Using the \$2.00 a gallon estimate, the respective figures were 13.33 cents, 9.50 cents and 6.90 cents.

c. Oil

To derive a cost figure for the motor oil used by an automobile, it was necessary to extract data from the

Department of Transportation 1976 report entitled "Cost of Owning and Operating an Automobile". Because this study was developed using prices from the Baltimore, Maryland area only, it was necessary to adjust the figures to the national level. This was accomplished by using the differential in private transportation costs in Baltimore, as compared to the private transportation costs throughout the country, as shown in the first three columns of Table 5. Further adjustment to the Department of Transportation figures was required to bring the 1976 costs to present-day levels. The 1976 costs were restated to the November 1979 level by applying the changes in the motor oil component of the Consumer Price Index, as shown in columns four and five of Table 5.

In the Department of Transportation study, oil consumption was expressed as a function of gasoline consumption. They determined that a standard automobile burned one gallon of oil for every 167 gallons of gasoline. Compact cars were evaluated on a consumption rate of one gallon of oil for every 119 gallons of gas and the subcompact at a rate of one gallon for every ninety-five gallons of gas. Included in these consumption rates is the oil used for the manufacturer's normal oil changes. These values were considered reasonable and used in this study.

The cost of oil per mile of automobile travel for the standard, compact and subcompact were .17 cents, .17 cents and .15 cents respectively, as shown in column six of Table 5.

TABLE 5
COST PER MILE FOR MOTOR OIL AND TIRES

Standard Car						
	<u>Baltimore 1976 Costs</u>	<u>Nationwide Adjust.</u>	<u>U.S. 1976 Costs</u>	<u>CPI Adjust.</u>	<u>U.S. Nov. 1979 Costs</u>	<u>Per Mile Costs</u>
Motor Oil	\$76.00	1.058	\$81.00	1.21	\$98.00	.17¢
Tires	\$166.00	1.058	\$175.00	1.221	\$177.00	.29¢
Compact Car						
Motor Oil	\$76.00	1.058	\$81.00	1.21	\$98.00	.17¢
Tires	\$160.00	1.058	\$170.00	1.221	\$207.00	.35¢
Subcompact Car						
Motor Oil	\$68.00	1.058	\$72.00	1.21	\$88.00	.15¢
Tires	\$130.00	1.058	\$137.00	1.221	\$167.00	.28¢

1. Figures rounded to nearest dollar

d. Tires

The technique used to develop tire cost over the five years was the same that was used to determine motor oil costs and is also shown in Table 5. For the standard size the subcompact it was assumed radial tires were used. Compact automobiles have typically been sold with fiberglass bias belted tires rather than radial tires. Therefore, the compact was assumed to be equipped with bias belted tires

throughout the life span of the car [54,6]. Updating the amounts obtained from the Department of Transportation yielded per mile expenses of .29 cents for the standard, .35 cents for the compact and .28 cents for the subcompact.

e. Servicing

It has been argued that no reimbursement should be made to a transferee for maintenance and servicing costs. The reasoning behind this thought is that the individual is expected to maintain his car properly and a move should have no bearing on this upkeep. Argument for inclusion of repair costs centers around the fact that most breakdowns are considered as a function of mileage. Since a transfer imposes mileage that would not have been driven, inclusion of per mile repair costs is argued.

Using the adjustment techniques discussed for tire and oil costs, maintenance and repair costs ranged from a high of 4.17 cents per mile to a low of 3.14 cents per mile. Included in this figure are routine maintenance items such as lubrication and flushing cooling systems; replacing parts such as spark plugs and fan belts and major repairs that included items such as valve jobs.

For the purposes of this study it was felt that the inclusion of repairs to the extent included in the Department of Transportation study was improper. However, certain maintenance costs should be considered. Standard servicing, as recommended at set intervals by car manufacturers, is a function only of mileage driven. For this reason these

servicing costs must be included to accurately determine operating costs as a function of mileage.

The American Automobile Association reported a cost of 1.10 cents per mile for this type of service in a standard car [3,3]. No figures were reported for the compact and subcompact. To estimate these costs the percentage of costs for maintenance and servicing reported by the Transportation Department study were applied to the American Automobile Association amount. Expenses of .81 cents per mile for both the compact and subcompact were found.

f. Summary of Automobile Operating Costs

To achieve an average cost figure for operating costs, a weighted average was computed using the costs developed in the preceeding five sections and summarized in Table 6.

TABLE 6
SUMMARY OF AUTOMOBILE OPERATING COSTS

Total Costs: Cents per mile			
	Standard	Compact	Subcompact
Depreciation	3.7	2.6	2.23
Gasoline (1.04/gal)	6.93	4.95	3.59
Oil	.17	.17	.15
Tires	.29	.35	.28
Servicing	<u>1.10</u>	<u>.81</u>	<u>.81</u>
TOTAL	12.19	8.88	7.06
TOTAL (gas \$2/gal)	18.59	13.41	10.37

The Federal Highways Administration reported that the registered mix of 1966 and later models as of December 1978 was 66.2 percent standard, 15.63 percent compact and 18.17 subcompact. Applying this mix to the costs developed yielded a weighted average of 10.74 cents per mile using \$1.04 per gallon of gasoline and 16.28 cents per mile using \$2.00 per gallon of gasoline.

4. Cost of Airline Transportation

For the quarter ended on June 30, 1979 over 632 million passenger miles were flown. This cost more than sixty-eight million dollars. Of this, slightly more than 623 million miles and 67.5 million dollars were for coach class [58,27]. Computing the expense for air transportation yielded a cost of 10.8 cents per mile. To evaluate the effects inflation has had on airline transportation costs since July 1, 1979, a sample of twenty-five flights was taken. (See Table 7, page 81.) The flights were of varying distances and originated from cities throughout the country. Most of the flights terminated in Washington, D.C. Two flights were selected originating in Monterey, California and terminating at locations greater than 3000 miles away.

The results revealed the cost per mile had increased from 10.8 cents to an average of 14.5 cents. Because the cost of a ticket for a short flight is proportionally higher than flights covering longer distances, the averaging technique produced a somewhat distorted figure. In the sample taken, a short flight such as from New York City to Washington

D.C., cost almost \$.27 per mile, while flights covering 3000 miles cost approximately \$.11 per mile. Since the averaging technique yields a gain or loss per mile up to \$.124, actual trip rates were used to calculate the costs that would be incurred.

5. Summary of Relocation Travel Expenses

The costs identified in the previous sections have been categorized as relocation travel expenses composed of the following cost elements: lodging (Sec. 1), meals (Sec. 2) and transportation (Sec. 3 and 4). As discussed in Chapter V, the transferee is expected to travel 300 miles per day. If traveling by automobile, the transportation costs equal \$32.22 per day. Lodging expenses would be \$39.55 per night, for a family of four. This is based on the assumption that the family would occupy the same room. Meal expenses for each day of travel would equate to \$66.14. Included in this figure is a fifteen percent gratuity and state taxes. Adding these amounts produces a daily relocation travel expense of \$137.30 for a family of four.

B. REAL ESTATE EXPENSES

1. Househunting Trip

The typical househunting trip is of six days duration and the employer usually allows expenses for both the employee and spouse. Components which are included in the reimbursement package are a travel component, lodging costs, and meal costs.

Travel is normally done by air. Therefore, the cost is approximately 14.5 cents per mile per person. Lodging

costs for two average \$32.24 per day. The husband and wife would typically spend \$34.70 each day for meals.

2. Closing Costs

The expenses associated with the selling and buying of a home represent the greatest outlay of funds incurred in a transfer. Duplicate housing costs or high mortgage differentials can cost an individual thousands of dollars. Buying an employee's house, and not being able to resell, would cost the company thousands of dollars.

Virtually all real estate expenses are a function of the selling price of the house and the mortgage interest rate. For instance, brokerage commissions are based on the selling price and the mortgage differentials are based on interest rates. With the wide range of home prices and the corresponding mortgage rates it is of little value to compute national averages for real estate expense elements. It is for this reason that costs are developed as a function of selling price.

Although there is no consensus among employers as to reimbursement policies for real estate expenses there is general agreement that, at the very least, closing costs of the seller should be covered. Included as normal closing costs are the brokerage commission, covered by 93 percent of the companies surveyed, and home appraisals and legal advice, which are covered by 75 percent of the companies surveyed. Reimbursement policies designed to help in the purchase of a

new home center around payment for closing costs, title costs, and escrow officer's fees.

The major portion of closing costs, whether selling or purchasing a home, is the broker's commission. According to the National Association of Realtors, the average commission charged to the seller is between 6 and 8 percent of the house selling price. Commission charges to the purchaser typically fall in the 2 through 6 percent range. This range was verified by talking with realtors from Monterey, California; Washington D.C., and Norfolk, Virginia. Each of the brokers questioned had commission rates falling in this range.

Appraisal costs, although a function of house location and the type of home, generally fall into the \$100 to \$150 range. Other miscellaneous expenses, including legal assistance, are approximately one hundred dollars. These values were considered reasonable and costs of \$125 for the appraisal and \$100 for miscellaneous expenses are used in this study [43].

C. SHIPMENT OF HOUSEHOLD GOODS

The cost of shipping household goods has been universally covered by the employer. For years employers have realized that if they are transferring people for the good of the company they must bear the cost of shipping the individual's household effects. Atlas Van Lines reported in the "12th Annual Survey of Corporate Moving Practices" that the average cost of this service was two thousand dollars. Homequity/Homerica Incorporated quoted a figure of \$2310 for their typical move [8,42].

D. TEMPORARY STORAGE OF HOUSEHOLD GOODS

Polling various Navy household goods departments, the average cost of temporary storage is one dollar per 100 pounds per day. A caveat is that, regardless of the time the goods remained in storage, the government was charged a minimum of thirty days.

Although storage-in-transit is expensive, it is normally of little concern to the transferee. Like the shipment of household goods, temporary storage costs are covered by most employers. In the surveys studies 82 percent of the firms reimbursed this expense [6,1].

E. TEMPORARY LIVING EXPENSES

Each day of interim living is composed of meal costs, lodging costs and miscellaneous expenses. For the purposes of calculating the per day living costs only meal and lodging expenses are considered. The miscellaneous expenses are treated under a separate category. Combining these costs which were developed earlier in this chapter, the daily living costs are \$105.69.

F. MISCELLANEOUS EXPENSES

Miscellaneous expenses are incurred throughout the transfer. Such costs include fees for the connection of utilities, alterations of draperies and carpeting, and driver's license registration.

Developing an average cost for the many incidental expenses was done by averaging the values given for such expenses in

four surveys. Two of the figures, \$1800 from Homequity/Homerica [53,29] and \$688 from a 1979 Department of Defense survey [76,Att 1], attempt to place an exact figure on expected miscellaneous expenses. The Defense Department's data was obtained from phone interviews with public utility companies, plumbers, electricians and transportation officials. The study admits that the survey was fragmentary and incomplete and was used mainly to illustrate that miscellaneous expenses are a substantial cost. Other figures utilized came from surveys of corporate relocation policies. Merrill Lynch indicated the average reimbursement for incidental expenses was approximately \$750 and Homequity [8,43] reported an average figure of \$1250.

Averaging the four amounts yielded a figure of \$1125. It was felt that this was a reasonable estimate of incidental expenses associated with a move. This cost figure will be used throughout the remainder of this study.

TABLE 4
COST PER MILE FOR STANDARD CLASS AIR TRANSPORTATION

To Washington, D.C.	Miles ¹	Cost ²	Cost/Mile ¢
From			
Amarillo, Tx.	1583	\$195	12.3
Atlanta, Ga.	625	\$104	16.6
Austin, Tx.	1504	\$187	12.4
Birmingham, Al.	741	\$116	15.6
Boston, Ma.	436	\$ 85	19.5
Cedar Rapids, Ia.	906	\$131	14.4
Chattanooga, Tn.	594	\$101	17.0
Cincinnati, Oh.	518	\$ 84	16.2
Dallas, Tx.	1333	\$174	13.0
Denver, Co.	1673	\$207	12.4
Ft. Lauderdale, Fl.	1062	\$145	13.6
Houston, Tx.	1423	\$177	12.4
Indianapolis, In.	596	\$ 98	16.4
Los Angeles, Ca.	2654	\$306	11.5
Louisville, Ky.	606	\$ 94	15.5
Memphis, Tn.	875	\$127	14.5
Minneapolis, Mn.	1098	\$145	13.2
New York, NY	223	\$ 60	26.9
Nashville, Tn.	657	\$104	15.8
Oklahoma City, Ok.	1320	\$170	12.9
St. Louis, Mo.	839	\$128	15.3

TABLE 4 (CONT.)

	Miles ¹	Cost ²	Cost/Mile ¢
San Francisco, Ca.	2812	\$321	11.4
Tucson, Az.	2247	\$256	11.4
From Monterey, Ca.			
To			
New York, NY	3001	\$322	10.7
New London, Cn	3133	\$350	11.2
Mean Average			14.5

¹NAVSO Official Table of Distances

²Official Airline Guide, March 1, 1979

VII. COMPARISON

The entitlements and rates of reimbursement differ greatly between the private sector, the Civil Service, and the military. In order to compare these three groups, a standard scenario was developed to show actual costs incurred during a typical permanent change of station move. This scenario was costed out based on the expenses delineated in Chapter VI, and then compared with the actual reimbursements given by each of the three employment groups, whose entitlements were delineated in Chapters III, IV, and V.

To structure these costs for comparative analysis, they were divided into three distinct events: pre-move, move, and post-move. The pre-move event begins when the individual is notified of his impending transfer and ends when he begins his actual travel. The post-move event is defined as that period of time between the arrival of the employee and his dependents in the area of his new duty station and when he moves into a permanent residence. The period of time between the pre-move and the post-move events is the move event. This method of division will be utilized because it allows for a more direct approach in determining the adequacy of military compensation during a permanent change of station move. For, as has been previously discussed, the military reimburses its members in two ways: the Dislocation Allowance and an allowance for travel, in the form of a mileage

allowance. Applying this to the events defined above, the Dislocation Allowance is intended to partially cover the costs incurred during the pre-move and post-move events, while the mileage allowance is intended to cover the costs incurred during the move event. Only those costs directly attributable to the transfer will be considered.

A. PERMANENT CHANGE OF STATION SCENARIOS

The permanent change of station scenarios, as developed in this chapter, are summarized in Table 8.

1. General

For the size of the typical family the United States Bureau of the Census was consulted [75]. Although the average family size has dropped from 3.7 people in 1965 to 3.37 people in 1977, a typical family size of four people was used for this study. This was done to facilitate the calculations for individual members of the family. The typical family for our model is the employee, his spouse, a male child age twelve, and a female child age seven. The children's ages, twelve and seven, were chosen because Titles 5 and 37 of the United States Code make a distinction between dependents twelve and over and dependents under twelve years of age.

For this study we will assume the family owns one standard size American made automobile and the family will drive this automobile from one duty station to the other.

The amount of household goods shipped by each family will not be considered since all three employment groups pay

TABLE 8

Scenario

General

Family size	-	2 adults, 2 children (ages 12 and 7)	
Automobile	-	1 standard size, American made	
Household Goods	-	Note 1	
Annual Income	-	\$26,000	\$12,000
Residence: Old	-	\$55,000	\$35,000
New	-	\$75,000	\$45,000

Pre-move Event

House Hunting Trip	-	6 days, employee and spouse	
Real Estate	-	Realtor sells house	
Temporary Lodging	-	5 days, entire family	
Temporary Storage	-	Note 1	
Miscellaneous	-	House cleaned, perishables, etc.	

Move Event

Length of Move	-	1000 miles	1500 miles	3000 miles
Days of Travel	-	4 days	5 days	10 days
Lodging	-	Motels (average priced)		
Meals	-	Restaurants (average priced)		

Post-move Event

Real Estate	-	Purchase home through a realtor		
Temporary Lodging	-	15 days, entire family		
Temporary Storage	-	Note 1		
Miscellaneous	-	Phone installation, spouse's driver's license, etc.		

Note: ¹ Paid by all employment groups considered; therefore, will not be included as a cost to the individual.

the costs of shipping household goods. Therefore, this expense will not be included as a cost to the individual.

Two levels of annual income were used for our typical family: \$26,000 and \$12,000. The \$26,000 figure roughly equates to an O-4¹ with ten years of military service, a GS-11² with nine years of government service, and an employee at the executive level of a corporation [6,8]. The \$12,000 figure corresponds to an E-5 with six years of military service, a GS-5 with four years of government service, and a comparable junior employee of a corporation [6,8]. The two military pay grades, O-4 and E-5, were chosen because they represent a significant level of career progression for an officer or enlisted person. This reasoning follows from the fact that an officer or enlisted person who is at these pay levels generally has made a decision to remain on active duty in the case of the officer or reenlist in the case of the enlisted person. The Civil Service and corporate employees were chosen because their annual incomes most closely matched those of the selected military pay grades.

¹The military pay structure consists of nine enlisted and eleven officer pay grades. The enlisted pay grades begin with E-1 and progress through E-9, while the officer pay grades begin with O-1 and progress through O-10.

²The Civil Service employee or General Schedule (GS) employee pay structure consists of fifteen pay steps beginning with GS-1 and progressing through GS-15.

Each of the two income level employees will sell a house at the old duty station and buy a house at the new duty station. The employee with the annual income of \$26,000 will sell a \$55,000 house and buy a \$75,000 house while the employee with the \$12,000 annual income will sell a \$35,000 house and buy a \$45,000 house [42].

2. Pre-move Event

The pre-move portion of the scenario was constructed with the following guidelines.

When notified of his impending transfer, the employee and spouse will make a six day househunting trip to the area of the new duty station. They will engage a realtor and locate a new domicile. Upon their return they will engage another realtor and place their current home on the market.

The family will stay in a motel near their home for five days while their household goods are packed and picked up, the house is cleaned by a professional cleaning service, and a final inspection is made of the house by the new owners.

The employee's household goods will not require temporary storage enroute to the new duty station. During the course of the pre-move event the family will incur various miscellaneous expenses, as delineated in Chapter VI.

3. Move Event

The move event is largely a function of the miles between the old and new duty stations. To determine the average length of move each of the services, Army [41], Air Force [44], Navy [39], and Marine Corps [38] were consulted.

From telephone interviews with representatives from the various branches the following data was obtained.

<u>Service</u>	<u>Average Distance</u>
Army	1,100 miles
Air Force	1,200 miles
Navy	1,200/3,000 miles
Marine Corps	1,500 miles

The Navy has two typical distances because a significant number of their moves made within the Continental United States are either up and down the east coast or from one coast to the other [39]. This information led us to choose 1000, 1500, and 3000 miles as typical distances for our models.

The next factor to consider was the travel time in days. All three employment groups under consideration, the private sector, the Civil Service, and the military, determine a maximum length of time for the move event and all three base their time determination on the number of miles to be travelled. If the employee travels by private automobile, the criteria used by the government is one day of travel for each 300 miles of distance between the starting point and the destination. As discussed in Chapter V almost all private corporations grant travel time using 300-400 miles a day as the standard. For the purposes of this study, one day of travel time is granted for each 300 miles. As an example, for a trip of 1000 miles a maximum travel time of four days would be allowed, for a 1500 mile trip, five days, and for a 3000 mile trip, ten days.

Again, these times are defined as the maximum time allowed. The transferee may take more or less time; however, he will only be reimbursed for the costs incurred during the authorized number of days of travel time.

The family will drive one car to the new duty station and will take the maximum authorized number of days of travel. They will stay in motels owned by large chains and will eat three meals a day in average priced restaurants.

4. Post-Move Event

The post-move portion of the scenario was constructed with the following guidelines. At the new duty station the employee continues to finalize the purchase of his new residence. His household goods will arrive at the new station and go into storage for twenty days. The family will arrive in the area and will stay in a motel for fifteen days while closing on their new home. The family will again incur the normal miscellaneous expenses developed in Chapter VI.

This scenario assumes for the military member that government quarters were not available at either duty station.

B. ACTUAL COSTS OF SCENARIOS

The actual costs of the scenarios are contained in Tables 9-14 and are summarized here.

ACTUAL COSTS

Miles Moved

	1000	1500	3000
O-4	\$10,803.00	\$11,054.00	\$12,035.00
E-5	\$ 8,503.00	\$ 8,754.00	\$ 9,735.00

These expenses were developed using the cost figures of Chapter VI and applying them to the scenarios described in this chapter.

The variance within the rows, that is, when holding the rank fixed is due solely to the different mileages involved. The number of nights in motels and number of meals required are a function of the length of the move.

The variance within the columns, that is, when the mileage is fixed, is due to the value of the houses bought and sold. Since realty costs are a percentage of the purchase/selling price of the home (as developed in Chapter VI), the higher valued house will cost more to sell and buy.

C. REIMBURSEMENTS FOR THE SCENARIOS

The reimbursements paid by each of the three employers are contained in Tables 9-14 and are summarized below. Reimbursement for military members and Civil Service employees is predicated on Title 37 and Title 5 of the U.S. Code, as described in Chapters III and IV respectively. For the purposes of this study corporate reimbursement policy is based on those costs, which were developed in Chapter VI, for which at least 75 percent of the companies evaluated in the various surveys granted compensation. As an example, more than 90 percent of the companies surveyed offered househunting trips; therefore, the cost of a househunting trip is considered a part of corporate reimbursement policy. On the other hand, approximately 30 percent of the firms surveyed covered the costs associated

REIMBURSEMENTS

		Miles Moved		
	1000	1500	3000	
Military				
O-4	\$616.00	\$753.00	\$1166.00	
E-5	\$485.00	\$622.00	\$1035.00	
Civil Service				
GS-11	\$12,720.00	\$13,008.00	\$14,082.00	
GS-5	\$ 8,691.00	\$ 8,979.00	\$10,053.00	
Private Sector				
Executive	\$ 9,642.00	\$ 9,917.00	\$10,970.00	
Jr. Employee	\$ 7,707.00	\$ 7,351.00	\$ 8,404.00	

with mortgage rate differential; because this cost is not compensated by at least 75 percent of the companies surveyed it is not considered a part of corporate reimbursement policy.

The variances within the rows are directly attributable to the different mileages. For the military, the only difference is the mileage rate multiplied by the additional distance. In the case of the Civil Service employee, the added mileage will increase reimbursement for a househunting trip, meals and lodging, as well as for mileage. The increased reimbursements for the corporate employee are similar to those of the Civil Service employee.

Variances within the columns are caused by two factors. First, all three employment groups are reimbursed at different rates for miscellaneous expenses. Secondly, the costs of

buying and selling a home are reimbursed differently for the Civil Service and the private sector. The military does not offer any reimbursement in this area.

D. COMPARISON

1. Pre-Move and Post-Move Events

In the pre-move event the civil servant and the corporate employee receive a househunting trip, while the military member does not. The need for this trip or the desirability of offering this trip to the military member will not be debated here. It is merely significant to note that, as discussed in Chapters IV and V, the trip is offered to virtually all transferring Civil Service Employees and by at least 75 percent of the major corporations.

If government quarters are not available, the military member is required to enter the housing market. Civil Service employees and almost all corporate employees are reimbursed for the costs associated with selling a residence. In addition, the Civil Service employee is also reimbursed for the costs associated with buying a home. The military member, although facing the same costs, is entitled to no reimbursement.

Often it is necessary to reside in temporary quarters either at the old duty station, the new duty station, or both. While the Civil Service employees and corporate employees offer some compensation in this area, the military member is not granted an allowance.

During every move various miscellaneous expenses are incurred. The civil servant is reimbursed either one or two weeks' pay depending on his marital status and the corporate employee is reimbursed one month's pay (as discussed in Chapter VI). The military member receives a dislocation allowance which is one month's Basic Allowance for Quarters. Based on the computations in Chapter VI, the Civil Service adequately covers these expenses and the corporations more than cover them while the military member is reimbursed for only about one third of the miscellaneous expenses incurred.

The actual dollar amounts of the disparity between real expenses and the amount reimbursed for the pre-move and post-move events are summarized here.

	1000 Mile		1500 Mile		3000 Mile	
	Actual Cost	Reim- bursed	Actual Cost	Reim- bursed	Actual Cost	Reim- bursed
Pre-move						
O-4	6423.00	341.00	6507.00	341.00	6777.00	341.00
E-5	5023.00	210.00	5107.00	210.00	5377.00	210.00
Post-move						
O-4	3835.00	Note 1	3835.00	Note 1	3835.00	Note 1
E-5	2935.00		2935.00		2935.00	
Total						
O-4	10258.00	341.00	10342.00	341.00	10612.00	341.00
E-5	7958.00	210.00	8042.00	210.00	8312.00	210.00

Note 1: Although the Dislocation Allowance is intended to partially defray miscellaneous expenses in both the pre-move and post-move events, for convenience the total has been placed under the pre-move event.

2. Move Event

While performing the actual travel between the old and the new location, the Civil Service employee receives a mileage allowance to cover the operating costs of his automobile and a per diem allowance to cover his lodging and subsistence costs. The corporate employee receives a mileage allowance and his lodging and subsistence expenses are covered in total. The military member receives a mileage allowance that is intended to cover all travel related expenses. The actual dollar amounts of the disparity between real expenses and the amount reimbursed for the move event are summarized here.

	1000 Mile		1500 Mile		3000 Mile	
	Actual Cost	Reim- bursed	Actual Cost	Reim- bursed	Actual Cost	Reim- bursed
Mileage	122.00	275.00	183.00	41	366.00	825.00
Meals and Lodging	423.00		528.00		1057.00	
Total	545.00	275.00	711.00	41	1423.00	825.00

This comparison clearly shows that the military member must pay significant out of pocket costs every time he makes a permanent change of station move. As an example, in the table above, for a 1000 mile move, the military member must pay \$270.00 over and above what he has been reimbursed.

E. GENERAL

Although relocation reimbursements granted to the military member are substantially below their costs incurred, there

are two areas where their benefits are superior to the Civil Service employees. The weight limit imposed on the military member's household goods, above the rank of O-3, is greater than those granted the Civil Service employees of comparable pay grade. In the other area, temporary storage of household goods is available to the military member for a period of up to 180 days. Although 180 days of storage is not extensively used it is a significant benefit that is available to the military member. This benefit is extended to the Civil Service employee for a period of thirty days unless returning from overseas when an additional thirty days is authorized. The military temporary storage policy also exceeds the corporate policy of allowing only sixty days.

F. E-4 AND BELOW

The scenario thus far developed fails to consider the junior enlisted members of the military, specifically E-4 and below with less than two years of service. The only entitlement given the junior enlisted in the above category during a permanent change of station transfer is a mileage allowance. He is not entitled to a mileage allowance for his dependents, a household goods shipment (over 225 pounds), or the Dislocation Allowance.

For example, consider the E-4 who is married, lives in an apartment, owns a car, 2500 pounds of household goods, and is transferred under permanent change of station orders

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to a new duty station 1000 miles away. He would incur the following expenses and reimbursements:

	Actual Costs	Reim- bursed
Relocation Travel		
Mileage	122.00	100.00
Meals and Lodging (4 days)	139.00	
Miscellaneous Expenses	300.00 ¹	
Household Goods	706.00	
Temporary Storage	25.00	
Temporary Lodgings (5 days)	328.00 ²	
Total	1620.00	100.00

Notes: ¹This figure includes: lost rent, lost deposit, loss on perishable foods, telephone installation, and driver's license for spouse.

²This figure includes the cost of meals and cost of lodging.

The junior enlisted is the least likely of all military members to be able to absorb the out of pocket expenses associated with a transfer. Yet, if he has a dependent and/or over 225 pounds of household goods, he is the most penalized.

TABLE 9

1000 MILES MOVE: O-5, GS-11, CORPORATE EXECUTIVE

Expenses	Actual Costs	Reimbursement		
		Military	Civil Service	Corporate
<u>Pre-Move</u>				
House Hunting Trip (6 Days)	694.64	NA	583.50	694.64
Real Estate	4,075.00	NA	5,500.00	4,075.00
Temporary Lodging (5 Days)	528.45	NA	393.75	528.45
Temporary Storage of Household Goods	Note 1	-	-	-
Miscellaneous	1,125.00	340.50	1,004.12	2,166.00
<u>Move</u>				
Relocation Travel Mileage	121.90	275.00	150.00	170.00
Meals & Lodging	422.76	Note 2	420.00	422.76
Shipment of Household Goods	Note 1	-	-	-
<u>Post-Move</u>				
Real Estate	2,250.00	NA	3,750.00	NA
Temporary Lodging (15 Days)	1,585.35	NA	918.40	1,585.35
Temporary Storage of Household Goods	Note 1	-	-	-
Miscellaneous	Note 3	-	-	-
<u>TOTAL</u>	10,803.10	615.50	12,719.77	9,642.20

Note: ¹ Paid by all employment groups considered; therefore, will not be included as a cost to the individual.

² Mileage allowance given to the military is intended to cover the costs of lodging and meals as well as automobile operation.

³ Total is considered in the pre-move section.

TABLE 10

1500 MILE MOVE: O-5, GS-11, CORPORATE EXECUTIVE

Expenses	Actual Costs	Reimbursement		
		Military	Civil Service	Corporate
<u>Pre-Move</u>				
House Hunting Trip (6 Days)	778.64	NA	691.50	778.64
Real Estate	4,075.00	NA	5,500.00	4,075.00
Temporary Lodging (5 Days)	528.45	NA	393.75	528.45
Temporary Storage of Household Goods	Note 1	-	-	-
Miscellaneous	1,125.00	340.50	1,004.12	2,166.00
<u>Move</u>				
Relocation Travel Mileage	182.85	412.50	225.00	255.00
Meals & Lodging	528.45	Note 2	525.00	528.45
Shipment of House- hold Goods	Note 1	-	-	-
<u>Post-Move</u>				
Real Estate	2,250.00	NA	3,750.00	NA
Temporary Lodging (15 Days)	1,585.35	NA	918.00	1,585.35
Temporary Storage of Household Goods	Note 1	-	-	-
Miscellaneous	Note 3	-	-	-
TOTAL	11,053.74	753.00	13,007.77	9916.84

Notes: ¹ Paid by all employment groups considered; therefore, will not be included as a cost to the individual.

² Mileage allowance given to the military is intended to cover the costs of lodging and meals as well as automobile operation.

³ Total is considered in the Pre-move section.

TABLE 11

3000 MILE MOVE: O-5, GS-11, CORPORATE EXECUTIVE

Expenses	Actual Costs	Reimbursement		
		Military	Civil Service	Corporate
<u>Pre-Move</u>				
House Hunting Trip (6 Days)	1,048.64	NA	1,015.50	1,048.64
Real Estate	4,075.00	NA	5,500.00	4,075.00
Temporary Lodging (5 Days)	528.45	NA	393.75	528.45
Temporary Storage of Household Goods	Note 1	-	-	-
Miscellaneous	1,125.00	340.50	1,004.12	2,166.00
<u>Move</u>				
Relocation Travel Mileage	365.70	825.00	450.00	510.00
Meals & Lodging	1,056.90	Note 2	1,050.00	1,056.90
Shipment of Household Goods	Note 1	-	-	-
<u>Post-Move</u>				
Real Estate	2,250.00	NA	3,750.00	NA
Temporary Lodging (15 Days)	1,585.35	NA	918.40	1,585.35
Temporary Storage of Household Goods	Note 1	-	-	-
Miscellaneous	Note 3	-	-	-
TOTAL	12,035.04	1,165.50	14,081.77	10,970.34

- Notes: ¹ Paid by all employment groups considered; therefore will not be included as a cost to the individual.
- ² Mileage allowance given to the military is intended to cover the costs of lodging and meals as well as automobile operation.
- ³ Total is considered in the Pre-move section.

TABLE 12

1000 MILE MOVE: E-5, GS-5, JUNIOR EXECUTIVE

Expenses	Actual Costs	Reimbursements		
		Military	Civil Service	Corporate
<u>Pre-Move</u>				
House Hunting Trip (6 Days)	694.64	NA	583.50	694.64
Real Estate	2,675.00	NA	3,500.00	2,675.00
Temporary Lodging (5 Days)	528.45	NA	393.75	528.45
Temporary Storage of Household Goods	Note 1	-	-	-
Miscellaneous	1,125.00	209.70	475.69	1,000.00
<u>Move</u>				
Relocation Travel Mileage	121.90	275.00	150.00	170.00
Meals & Lodging	422.76	Note 2	420.00	422.76
Shipment of Household Goods	Note 1	-	-	-
<u>Post-Move</u>				
Real Estate	1,350.00	NA	2,250.00	NA
Temporary Lodging (15 Days)	1,585.35	NA	918.40	1,585.35
Temporary Storage of Household Goods	Note 1	-	-	-
Miscellaneous	Note 3	-	-	-
TOTAL	8,503.10	484.70	8,691.34	7,076.20

Notes: ¹ Paid by all employment groups considered; therefore will not be included as a cost to the individual.

² Mileage allowance given to the military is intended to cover the costs of lodging and meals as well as automobile operation.

³ Total is considered in the Pre-move section.

TABLE 13

1500 MILE MOVE: E-5, GS-5, JUNIOR EXECUTIVE

Expenses	Actual Costs	Reimbursements		
		Military	Civil Service	Corporate
<u>Pre-Move</u>				
House Hunting Trip (6 Days)	778.64	NA	691.50	778.64
Real Estate	2,675.00	NA	3,500.00	2,675.00
Temporary Lodging (5 Days)	528.45	NA	393.75	528.45
Temporary Storage of Household Goods	Note 1	-	-	-
Miscellaneous	1,125.00	209.70	475.69	1,000.00
<u>Move</u>				
Relocation Travel Mileage	182.85	412.50	225.00	255.00
Meals & Lodging	528.45	Note 2	525.00	528.45
Shipment of Household Goods	Note 1	-	-	-
<u>Post-Move</u>				
Real Estate	1,350.00	NA	2,250.00	NA
Temporary Lodging (15 Days)	1,585.35	NA	918.40	1,585.35
Temporary Storage of Household Goods	Note 1	-	-	-
Miscellaneous	Note 3	-	-	-
TOTAL	8,753.74	622.20	8,979.34	7,350.89

- Notes: ¹ Paid by all employment groups considered; therefore will not be included as a cost to the individual.
- ² Mileage allowance given to the military is intended to cover the costs of lodging and meals as well as automobile operation.
- ³ Total is considered in the Pre-move section.

TABLE 14

3000 MILE MOVE: E-5, GS-5, JUNIOR EXECUTIVE

Expenses	Actual Costs	Reimbursements		
		Military	Civil Service	Corporate
<u>Pre-Move</u>				
House Hunting Trip (6 Days)	1,048.64	NA	1,015.50	1,048.64
Real Estate	2,675.00	NA	3,500.00	2,675.00
Temporary Lodging (5 Days)	528.45	NA	393.75	528.45
Temporary Storage of Household Goods	Note 1	-	-	-
Miscellaneous	1,125.00	209.70	475.69	1,000.00
<u>Move</u>				
Relocation Travel Mileage	365.70	825.00	450.00	510.00
Meals & Lodging	1,056.90	Note 2	1,050.00	1,056.90
Shipment of Household Goods	Note 1	-	-	-
<u>Post-Move</u>				
Real Estate	1,350.00	NA	2,250.00	NA
Temporary Lodging (15 Days)	1,585.35	NA	918.40	1,585.35
Temporary Storage of Household Goods	Note 1	-	-	-
Miscellaneous	Note 3	-	-	-
TOTAL	9,735.04	1,034.70	10,053.34	8,404.34

Notes: ¹ Paid by all employment groups considered; therefore will not be included as cost to the individual.

² Mileage allowance given to the military is intended to cover the costs of lodging and meals as well as automobile operation.

³ Total is considered in the Pre-move section.

VIII. CONCLUSION AND RECOMMENDATIONS

In this chapter the research question posed in Chapter I is answered. Following the conclusion, problem areas developed in Chapter VII are presented along with recommendations for their solution. The final section addresses proposals for further research.

A. CONCLUSION

This study was undertaken to answer the question: Is the military adequately reimbursing members for permanent change of station moves? In answering the question it must be remembered that "adequately" was defined to encompass the magnitude of the difference between actual costs and military reimbursement and also the magnitude of the difference between military reimbursement and reimbursement found in the Civil Service and private sector. On the basis of the study done, the research question must be answered negatively. The military does not adequately reimburse members for permanent change of station moves.

Annually, military members pay approximately one billion dollars more than they are reimbursed while conducting permanent reassignment for the convenience of the government. This represents a significant reduction in the real pay members receive for their regular compensation. The loss is directly attributable to the mandatory requirement that military members relocate for the good of the service.

The current military reimbursement policy, which causes this one billion dollar underpayment, grants two allowances. First, the mileage allowance is designed to provide compensation for the costs actually incurred during travel. An annual underpayment to members of nearly 121 million dollars is realized in this relocation entitlement. Secondly, costs incurred during the pre-move and post-move events are to be covered by the Dislocation Allowance. The current level of reimbursement produces a shortfall of roughly 840 million dollars per annum. The above figures were calculated by multiplying the difference in actual costs and reimbursed amounts developed in Chapter VII by the number of moves in each distance category: 1000, 1500, and 3000 miles.

In answering the phase of the research question dealing with comparability of the three sectors, it must be remembered that the private sector was the standard for the analysis. Because the costs and reimbursements were developed based on the private sector's reimbursement policies, the magnitude of the difference between the military and major corporations are approximately the same as those presented above. As was pointed out in Chapter VII, the Civil Service employee is compensated to a greater extent than the corporate employee and substantially more than the military member.

These figures vividly point out that the current military travel reimbursement policy does not meet the following recommendations expressed by the Advisory Commission on Service Pay.

Expenses incurred in authorized personal travel and transportation of dependents and goods should not be borne by the serviceman; conversely, reimbursement by the Government should not result in pay increase. These expenses are nothing more or less than administrative or overhead costs for operating the business of the Uniformed Services. As in industry, payments for such necessary movement of people and property should not be associated with or charged to individual basic compensation. [5,2-2]

This philosophy is as valid today as it was when first expressed in 1948. Industry and the government civil service recognize these costs as a requirement for doing business. Of necessity, the expenses developed are covered by these employer groups because failure to do so results in refusals to transfer, the inability to hire the best people, and the inability to retain the individuals needed.

Compounding the situation is that no immediate correction of the problem is possible without legislative action. None of the legal reimbursement alternatives now authorized by Congress will cover the costs incurred on a permanent change of station move. It is within the power of the Department of Defense, however, to effect changes that will help alleviate the disparity. The only relief currently available is altering the reimbursement policies for transportation expenses. By allowing the maximum payment authorized by Congress, the 121 million dollar deficit can be significantly reduced. To develop an adequate relocation entitlement package, however, legislative action is required. Section B recommends what actions should be taken at the DoD level and the Congressional level.

B. PROBLEMS AND RECOMMENDATIONS

Problem areas and their associated recommendations fall into three categories which are discussed in the three sections below: recommendations that can be implemented through Department of Defense policy changes, recommendations requiring Congressional action, and general recommendations.

In developing recommendations for correcting the problems presented, practical aspects of the administration of the travel reimbursement package were considered. Although the audit and consideration of actual expenses incurred on each move would provide the greatest control of funds, this procedure was found to be too complex and expensive to be considered. Payment should therefore continue to be on the basis of standard amounts or formulas. This would keep administrative interpretation to a minimum. By applying this type of policy, some overpayments and underpayments will occur. However, in the course of a service member's career he will likely make several permanent change of station moves, with offsetting overpayments and underpayments. This averaging technique is more favorable than devising a complex, expensive method that will handle all contingencies. The following recommendations therefore involve the continued use of standard amounts or formulas. The budget impacts of these recommendations are shown in Table 15 on page 118.

1. Department of Defense Policy Changes

a. Entitlements for Junior Enlisted Persons

As was shown, the junior enlisted members (grades E-1 to E-4 with less than two years of service) are denied many travel and transportation reimbursements when ordered on a permanent change of station move. Specifically, the Joint Travel Regulations do not authorize the payment of entitlements for dependent travel. This restriction in most cases limits the junior enlisted to only a \$.10 per mile reimbursement for the move. In practice this forces the junior enlisted member to absorb the cost of moving his dependents on a government directed move. Thus, the individual who can least afford additional financial responsibilities is forced to accept a greater burden than other members of the military. Immediate policy changes should be initiated to provide an allowance for the travel of dependents regardless of the pay grade of the member. Included should be authorization for the shipment of household goods.

Implementation of this policy would require an additional 124 million dollars in defense spending (see Table 15, "Junior Enlisted Transfer", for calculations).

b. Improvements in Reimbursement for the Move Event

In Chapter VII it was shown that a significant disparity exists between the actual costs incurred and the amount of reimbursement the military member receives. The reimbursement granted was found to be approximately 45 percent

below the actual costs of the move. To help reduce this underpayment, the Department of Defense must immediately make two policy changes.

Law allows the travel allowance to be either i) a flat mileage rate, currently \$.10, or ii) reimbursement for transportation in kind, or iii) the payment of a monetary allowance in lieu of transportation plus a per diem rate. Current Department of Defense regulations permit only the first two options. The Defense Department should change its policy to allow the member the choice of selecting any of the three reimbursement methods.

Selection of the Monetary Allowance In Lieu Of Transportation would grant the member \$.07 per mile plus \$35.00 a day per diem. The monetary allowance in lieu of transportation option would reduce the disparity between actual costs and compensation when the travel is accomplished by private automobile.

To further alleviate the difference between the expenses incurred and the reimbursement granted, the military should raise the mileage rate for dependents between the ages of two and eleven inclusive from \$.035 per mile to the \$.07 per mile allowed by law.

Combining these two recommendations the relocation travel losses realized during the move event would be minimized. The bachelor's daily losses would be reduced from \$51.70 to \$25.70. The family of four would lose \$18.30 per day under this format as compared to \$54.80 with the current system. An

additional sixty-nine million dollars would be required to fund this proposal (see Table 15, "Mileage Allowance In Lieu Of Transportation," for calculations).

2. Congressional Action

a. Mileage and Per Diem

To adequately cover the expenses incurred during actual travel a fundamental change in military reimbursement practice must take place. In Chapter VII the large disparity between the actual costs and the amount of reimbursement granted during the move event was revealed. As discussed in the previous section dealing with "DoD Policy Changes," this problem cannot be solved by existing law. Congress must be prevailed upon to allow payment in a manner similar to the Civil Service.

The reimbursement should be flexible enough to allow for changes in the economy. Our recommendation is that the rates granted for automobile operating costs and per diem should be evaluated using the Consumer Price Index for the individual cost components as a guide. It is recognized that this necessitates periodic review, with the frequency being dependent upon the magnitude of price changes.

Based on calculations presented in Chapter VI the amounts that are needed to cover the costs incurred are 10.74 cents per mile and \$46.58 a day for per diem. It is not practical to work with figures of this nature so close approximations were used: \$.15 per mile and \$45 per day. Fifteen cents was used instead of \$.10 or \$.11 because of current

events affecting the price of gasoline. With the nationwide price of gasoline having increased from \$1.04 to \$1.12 per gallon during the month of February 1980 and the President's recent appeal for a \$.10 per gallon increase in gasoline taxes the \$2 a gallon cost for gasoline is a real possibility. If gasoline does reach the \$2 figure the cost of operating an automobile would be \$.16 per mile, as developed in Chapter VI.

The increase in the per diem rate is a reflection of the costs generated in Chapter VI. Forty-five dollars was chosen to facilitate calculations and still closely approximate the \$46.58 that was computed as the daily cost for lodging and meals. Dependent per diem takes into account the approximate cost of their lodging and meals.

A sliding scale of per diem rates, which currently exists for temporary duty reimbursement, is not recommended for reimbursing travel costs during a permanent change of station moves. Rejection of this method is based on the assumption that management of the system would be cumbersome, allow for administrative interpretation, and be expensive to control. For instance, a member on a permanent change of station move from Boston, Mass., to Ft. Lauderdale, Fla., would be granted five days travel time. Although the travel time is based on the most direct route, the member is not obligated to travel this route. If a sliding system were in effect, questions would be raised as to whether per diem should be based on the most direct route, cities the member actually

travelled through, or those cities and towns spaced 300 miles apart.

Using the reimbursement policy of \$.15 per mile and a flat rate of \$45.00 per day per diem, the bachelor would be overpaid \$9.30 per day, the family of two would be overpaid \$2.73, and the family of four would realize a shortage of \$2.30 per day. Adoption of this policy would require approximately 101 million dollars in additional funding (see Table 15, "Mileage Plus Per Diem," for calculations).

b. Temporary Living Allowance

In Chapters IV and V it was pointed out that the Civil Service employee and the private sector employee were granted a temporary living allowance. The allowance is to cover the cost of living in motel-like accommodations and meals after arriving at the new location and prior to making final arrangements and moving into a new residence. Currently, the law does not allow the military member this reimbursement for moves within the Continental United States. This restriction forces the military member to absorb these costs.

Civil Service and corporations attempt to minimize the total cost of granting a temporary living allowance by allowing the employee a househunting trip prior to their transfer. This will reduce the time required before moving into the new residence and thereby minimize the costs.

The military cannot currently authorize househunting trips. It is felt that not granting househunting trips is valid and should not be authorized in the future. This stance

is based on administrative impracticality and the costs involved.

Because many military bases provide living quarters for the member, regulating who requires a househunting trip and who does not would be administratively infeasible. Using the housing at the Naval Postgraduate School, Monterey, California as an example, suppose two housing units are available and four families have orders to the area. Making the determination of who receives the trip and who does not would create a situation requiring administrative interpretation.

Currently the military provides quarters for 44.1 percent of the members of the Armed Forces. Another 34.8 percent rent housing at their duty station. Granting househunting trips to the remaining 21.1 percent of the military would be costly and highly prejudicial.

Because no househunting trip should be authorized, it is probable that the member will require more days to become settled at the new duty station than if the trip were allowed. It is recommended that a total of thirty days of temporary living expenses be authorized. Thirty days would be sufficient time for families to vacate their old residence and move into either government quarters or find a suitable rental. Those purchasing homes should be able to find and move into their permanent residence or locate suitable interim housing. A further argument in favor of granting thirty days

temporary living allowance on moves within the Continental United States is that this is a recognized and reimbursed expense on overseas moves.

Reimbursement should be granted to the member at the currently established per diem rate for the area and \$15.00 per day for dependents over the age of two. A restriction should be placed on the days allowable at the old residence. For instance, entitlements should be granted for only the days between the time the household goods are packed and the date of detachment from the command.

Authorizing a temporary living allowance for a period thirty days would cost the government a maximum of slightly over one billion dollars. This equates to 33.8 million dollars per day authorized (see Table 15, "Temporary Lodging," for calculations).

c. Reimbursement for Real Estate Selling Expenses

For those individuals who own homes the apprehension of an ensuing relocation is perhaps greatest. The expenses associated with the sale of a house are the greatest single outlay of money in effecting a transfer. Both the Civil Service and the private sector reimburse all normal selling costs. Currently the military is not authorized to reimburse members for these costs. This represents a very significant expense which must be borne by the individual, even though he is required to move.

It is recommended that military members be reimbursed for the normal expenses associated with selling a home.

The maximum allowable amount should be 7 percent of the selling price, or \$6000, whichever is less. This entitlement should be granted only when the member is living off-base at the old location as a result of the non-availability of government housing.¹

If the average price of a house is \$75,000, this reimbursement plan would cost the government approximately \$760 million. Based on an average price of \$50,000, the cost would be roughly \$505 million (see Table 15, "Real Estate Expenses," for calculations).

d. Dislocation Allowance

The Dislocation Allowance is designed to partially offset the expenses that are incurred during the pre-move and post-move events. Currently military members are being underreimbursed approximately 840 million dollars annually. If the previous recommendations are adopted, the shortage will decrease. However, there will still remain a disparity between the incidental expenses realized and the amount given for the Dislocation Allowance. As illustrated in Chapter VII, this disparity would be between \$700 and \$900 per member moved.

Legislation should be proposed that would attach the Dislocation Allowance authorized to salary instead of the

¹Under current housing regulations persons electing to not live in government quarters when available forego the Basic Allowance for Quarters payment. This is done to insure maximum use of government built homes. The recommendation presented is made so as not to undermine the goals and regulations currently in effect for government provided quarters.

allowance for quarters. Although the current system of paying Dislocation Allowance is related to salary through the Basic Allowance for Quarters, it does not increase proportionally or with every pay increase. Payment of the allowance as a direction function of salary is used by both the Civil Service and the private sector.

The argument for attaching the miscellaneous expense allowance to salary is that people tend to improve their lifestyle with increases in salary. Following this reasoning the expenses for drapes, carpets, and the perishables that must be disposed of are greater the higher the salary.

It is recommended that the Dislocation Allowance be equal to two weeks' pay for married members and one week's pay for single members. Seventy eight million dollars in additional funding would be required to finance this proposal (see Table 15, "Dislocation Allowance," for calculations).

3. General Recommendations

a. Link Military and Civil Service Permanent Change of Station Entitlement Legislation

The Department of Defense should attempt to obtain concurrent legislative action from Congress for military members when such legislation for civilian employees is under consideration. This would be logical due to the fact that the Per Diem, Travel, and Transportation Allowance Committee has the responsibility of formulating regulations regarding permanent change of station entitlements for both the military

and Civil Service. If accomplished, this format would allow for more regular updating of military travel regulations.

b. Authorize Advance Payment of Travel Allowances

Advance payment of travel allowances should be authorized. Present policy allows a member to receive only his mileage allowance prior to performing the move. Reimbursement for dependents' travel and payment of the Dislocation Allowance is not paid until the travel has been completed. As a result, the member must finance an even greater portion of the trip from his own pocket. This places undue financial hardship on the member. It is recommended that the member's and his dependents' travel allowances be paid in advance of the member's departure from the old duty station.

C. FUTURE STUDIES CONCERNING THE USE OF RELOCATION FIRMS

In recent years the number of companies making use of relocation firms has risen steadily, 36 percent in 1977 to 45 percent in 1978 [57,5]. The services rendered by these companies vary depending on the needs of the contracting firm. A typical example is the program run by Homequity/Homerica for Continental Grains. Homequity provides for the purchase of the transferee's home at a fair market value, it helps with the search for a new residence, and it arranges for the shipment of the individual's household goods [8,42].

The benefits of using such a service are reducing the frustrations of the transferee and the administrative workload of the company's personnel division. In some cases,

companies have realized a substantial cost savings, as much as 25 percent [8,43]. An area for study would be a cost-benefit analysis of the military contracting out its permanent change of station entitlements.

TABLE 15
BUDGET IMPACT

JUNIOR ENLISTED TRANSFER

- Assumptions:
1. No E-1 move on permanent change of station orders,
 2. No E-4 have less than two years of service,
 3. The percentage of E-2, E-3 in the Navy that move is equal to the percentage that move in other services,
 4. All members are married and have no children,
 5. All members have 2500 pounds of household goods,
 6. All moves are 1000 miles. This is due to the location of the training commands of the services.

Derivation:

$$\left(\begin{array}{c} \text{Cost To} \\ \text{Govt.} \end{array} \right) = \left(\begin{array}{c} \text{Number of} \\ \text{Moves} \end{array} \right) \times \left(\begin{array}{c} \text{Dependent Travel} \\ \text{Allowance} \end{array} + \begin{array}{c} \text{Dislocation} \\ \text{Allowance} \end{array} + \begin{array}{c} \text{Cost of Household} \\ \text{Goods Shipment} \end{array} \right)$$

Number of Moves = 131,843 per year [38,39,41,44]

Dependent Travel Allowance = \$70.00

Dislocation Allowance = \$160.80

Household Goods Shipment = \$705.69

$$\begin{aligned} \left(\text{ANNUAL BUDGET IMPACT} \right) &= \left(\text{ANNUAL COST OF RECOMMENDATION} \right) \\ &\quad - \left(\text{CURRENT ANNUAL COST} \right) \\ \$123,469,651 &= \$123,469,651 \quad - \quad \$00.00 \end{aligned}$$

TABLE 15 (CONT.)

MILEAGE ALLOWANCE IN LIEU OF TRANSPORTATION

- Assumptions: 1. Number of moves include E-1 through E-4,
2. One half of the overseas moves require no travel reimbursements because the member chose to fly to the location.

Derivation:

$$(\text{Mileage Costs}) = (\text{Move Length}) \times (\text{Number of Moves}) \times (.28/\text{mile})$$

$$(\text{Per Diem Costs}) = (\text{Number of Days Authorized}) \times (\text{Number of Moves}) \times (\$35.00)$$

Army:

Length = 1,100 miles Number of Moves = 125,679 [41]
4 days authorized

Air Force:

Length = 1,200 miles Number of Moves = 96,150 [44]
4 days authorized

Navy:

Length = 1,200 miles Number of Moves = 59,308 [39]
4 days authorized

Length = 3,000 miles Number of Moves = 59,308 [39]
10 days authorized

Marine

Length = 1,500 miles Number of Moves = 35,688 [38]
5 days authorized

$$(\text{ANNUAL BUDGET IMPACT}) = (\text{ANNUAL COST OF RECOMMENDATION})$$

$$\begin{array}{rcl} & & - (\text{CURRENT ANNUAL COST}) \\ \$69,143,643 & = & \$222,113,080 - \$152,969,437 \end{array}$$

TABLE 15 (CONT.)

MILEAGE PLUS PER DIEM

- Assumptions: 1. Number of moves include E-1 through E-4,
 2. One half of the overseas moves require no travel reimbursements because the member chose to fly to the location.

Derivation:

$$(\text{Mileage Costs}) = (\text{Move Length}) \times (\text{Number of Moves}) \times (.15/\text{mile})$$

$$(\text{Per Diem Costs}) = (\text{Number of Days Authorized}) \times (\text{Number of Moves}) \times (\$90.00)$$

Army:

Length = 1,100 miles Number of Moves = 125,679 [41]
 4 days authorized

Air Force:

Length = 1,200 miles Number of Moves = 96,150 [44]
 4 days authorized

Navy:

Length = 1,200 miles Number of Moves = 59,308 [39]
 4 days authorized

Length = 3,000 miles Number of Moves = 59,308 [39]
 10 days authorized

Marine:

Length = 1,500 miles Number of Moves = 35,688 [38]
 5 days authorized

$$(\text{ANNUAL BUDGET IMPACT}) = (\text{ANNUAL COST OF RECOMMENDATION}) - (\text{CURRENT ANNUAL COST})$$

$$\$101,114,558 = \$254,083,995 - \$152,969,437$$

TABLE 15 (CONT.)

TEMPORARY LODGING

- Assumptions: 1. People returning from overseas duty stations require temporary lodging and this equates to one half the total overseas moves,
2. Average per diem rate equals \$45.00 per day.

Derivation:

$$\left(\begin{array}{c} \text{Cost to} \\ \text{Government} \end{array} \right) = \left(\begin{array}{c} \text{Total Number} \\ \text{Moves} \end{array} \right) \times \left(\begin{array}{c} \text{Days} \\ \text{Authorized} \end{array} \right) \times \left(\begin{array}{c} \text{Daily Per} \\ \text{Diem Rate} \end{array} \right)$$

Total Number of Moves = 376,132 [38,39,41,44]

Days Authorized = 30

Per Diem Rate = \$90.00

ANNUAL BUDGET IMPACT = ANNUAL COST OF RECOMMENDATION
- CURRENT ANNUAL COST

\$1,015,556,400 = \$1,015,556,400 - \$00.00

REAL ESTATE EXPENSES

- Assumptions: 1. The random sample taken correctly reflects the attributes of the entire military.

Derivation:

$$\left(\begin{array}{c} \text{Cost to} \\ \text{Government} \end{array} \right) = \left(\begin{array}{c} \text{Number of} \\ \text{Homeowners} \end{array} / 3 \right) \times \left(\begin{array}{c} \text{Average Price} \\ \text{of Home} \end{array} \right) \times (7\%)$$

Number of Homeowners = 432,550 [18]

Derived from a random sample of over 100 military installations and included the responses of 237,372 military members of all pay grades. The percentage owning homes was 21.1%. Division by three was done to estimate the number of homeowners that moved annually.

TABLE 15 (CONT.)

Average Price of Home = \$75,000
\$50,000

$$(\text{ANNUAL BUDGET IMPACT}) = (\text{ANNUAL COST OF RECOMMENDATION}) - (\text{CURRENT ANNUAL COST})$$

\$75,000 Home

\$756,962,500 = \$756,962,500 - \$00.00

\$50,000 Home

\$504,641,667 = \$504,641,667 - \$00.00

DISLOCATION ALLOWANCE

Assumptions: 1. Everyone currently receiving the dislocation allowance on permanent change of station orders is married.

Derivation:

$$\text{Cost to Government} = \frac{\text{Current Cost of DLA} \times (\text{DLA/Base Pay as Percentage})}{2}$$

Current Cost of DLA = 60,000,000

DLA/Base pay Percentage = 21.7

Figure was obtained by dividing the DLA given by the pay for each pay grade

2 = Two weeks salary

$$(\text{ANNUAL BUDGET IMPACT}) = (\text{ANNUAL COST OF RECOMMENDATION}) - (\text{CURRENT ANNUAL COST})$$

\$78,248,847 = \$138,248,847 - \$60,000,000

LIST OF REFERENCES

1. Administrative Management Society. "Company Policies in Reimbursement of Moving Expenses." Committee of 500 survey, March 1977.
2. Advisory Commission on Service Pay, "Career Compensation for the Uniformed Services," Washington, D. C. 1948.
3. American Automobile Association. "Your Driving Costs," 1979.
4. American Management Association, Inc., "Reimbursing Personnel for Transfer and Relocation Costs," AMA Research Study 67, New York, 1964.
5. Assistant Secretary of Defense Manpower and Reserve Affairs, Review of Permanent Change of Station Travel Entitlements, by Major Louis Seelig, USA, Major Stanfield Frost, Jr., USAF, LTC Daniel Schrader, USMC and CDR Joseph Sestric, USN, p. 1-117, July 1976.
6. Atlas Van Lines, Corporate Moving Policy Manual, p. 1-43, 1979.
7. Atlas Van Lines, Atlas Van Lines 12th Annual Survey of Corporate Moving Practices, 12th Edition, 1979.
8. Bagley, Barbara, "One Solution to Employee Transfer Problems." Traffic Management, v. 16, no. 5 (May 1977), 42-43.
9. Bardi, Edward and Jack Simonetti, "The Game of Management Chess - Policies and Perils of Management Transfers," Personnel Journal (April 1977), 195-197, 201-202.
10. Bell, Theodore, "Making the Move Easier Employee Transfer Service Saves Time, Money and Grief." Management World, v. 6, no. 8 (August 1977), 3-6.
11. Best Western, "Best Western 1979 Road Atlas and Travel Guide," R.R. Donnelley and Sons Company, Phoenix, Arizona, 1979.
12. "Borrowed Truck Okayed for Moving," Navy Times, 26 November 1979.
13. Breen, Denis, "Regulation and Household Moving Costs," Regulation (Sept/Oct, 1978), 51-54.

14. Capolarello, Joseph A., "Employee Mileage Allowances: Too High or Too Low?" Personnel Journal, vol. 54, no. 2 (Feb 1975), pp. 107-108, 117.
15. "CBS Nightly News," telecast Jan 24, 1978. Narrator, Walter Cronkite.
16. "Checklist for Developing an Employee Relocation Policy," The Personnel Administrator, v. 23, no. 2 (Feb 1978), 25-31, 44-45.
17. "Corporate Moving Policies," Distribution Worldwide (Sept 1977), 58-62.
18. Department of the Navy, Naval Facilities Command. Average Monthly Expenditure Report by Family Housing Complex, Dec 12, 1979.
19. Department of the Navy, Office of the Secretary to Assistant Secretary of Defense (Manpower, Reserve Affairs and Logistics). Subject: Special Study of Military Compensation. Sept 1979.
20. Department of the Navy. NAVSO P2471: Official Table of Distance. (1979)
21. DiDomenico, Peter Jr., "Current Trends in Employee Relocation," The Personnel Administrator (Feb 1978), p. 17-21.
22. Dupont Corporation, "Employee Relocation Guide," 1-41.
23. Employee Relocation Council. Executive Digest. "Employee Relocation Trends."
24. Employee Relocation Council. Executive Digest. "1979 Comprehensive Survey of International Relocation Policies."
25. Employee Relocation Council. Executive Digest. "Corporate Relocation Policies for Current Employees - 1978".
26. "Expatriate's Deduction for 1977 Moving Expenses can be Increased," The Tax Advisor, Vol. 10, no. 7 (July 1979), 406-407.
27. Ferguson, Reeser S., Military vs. Civilian PCS Allowances, paper presented at Professional Military Comptroller Course, Maxwell AFB, Alabama, Class 79-B.
28. Finkin, Eugene, "Compensating Transferred Employees," Personnel (Nov-Dec, 1978), 43-52.

29. Foote, Marion, "Compensation Plans for U.S. Expatriates," Tax Executive, v. 30, no. 3 (April, 1978), 245-257.
30. Foster, Lawrence, Marilyn Liebrez, "Corporate Moves - Who Pays the Psychic Costs?", Personnel (Nov-Dec, 1977), 67-75.
31. "Fourth of U.S. Income Spent on Driving Cars," Monterey Peninsula Herald, Nov 22, 1979.
32. General Services Administration. Interim Investigation of Operating Costs for Privately Owned Automobiles. Washington, D.C. June 1979.
33. Glueck, William, "Easing the Trauma of Executive Transfer," Business Horizons (Dec. 1969), 23-28.
34. Gorlin, Harriet. Elements of Corporate Relocation Assistance Policies. New York. The Conference Board, Report No. 715, 1977.
35. Graham, Sandy and Paul Ingrassia. "Job Transfers, Switches Are Slowing Down As Many People Can't Sell or Buy Houses," The Wall Street Journal, Nov 7, 1979, p. 48, cols. 1-4.
36. Hamilton, Martha. "D.C. Pay for Car Mileage Ranks Lowest in Survey," The Washington Post, August 19, 1979.
37. Holiday Inns Inc., Holiday Inn Directory, November 1979.
38. Interview with MAJ. Atkinson, USMC, MMPA-2, Headquarters, United States Marine Corps, Washington, D.C., November 27, 1979.
39. Interview with W. Cohen, Navy Finance Center, Cleveland, Ohio, November 20, 1979.
40. Interview with Cris Collie, Executive Vice President, Employee Relocation Council, Monday Nov 23, 1979.
41. Interview with LCOL A. Crowell, USA, Deputy Chief of Staff, Budget Division, Headquarters, Department of the Army, Washington, D.C., November 21, 1979.
42. Interview with Robin Hansen, Monterey Federal Credit Union, Monterey, California, March 6, 1980.
43. Interview with Statistical Branch of the National Association Realtors of America, Feb 11, 1980.
44. Interview with Capt. M. Robards, USAF, Air Force Manpower Personnel Center, Randolph Air Force Base, San Antonio, Texas, November 6, 1979.

45. Interview with LCDR Hank Schmauss, Navy member of the Per Diem Travel and Transportation Allowance Committee, Nov 23, 1979.
46. Interview with LCDR Craig Wetterline, Navy Permanent Change of Station Funding Division, Bureau of Naval Personnel, Nov 23, 1979.
47. "It's Your Move. How Hard Will It Hurt?" Business Management (Nov 1970), 21-24.
48. Jahrling, Walter, "Relocation: Moving Ahead," The Personnel Administrator (Feb 1978).
49. Joint Travel Regulations, Vol. 1, Members of the Uniformed Services, Department of Defense, Washington, D.C.
50. Joint Travel Regulations, Vol. 2, DoD Civilian Personnel, Department of Defense, Washington, D.C.
51. Kelly Blue Book Co., Kelly Blue Book Auto Market Report, Official Guide Western Edition (Jan-Feb, 1980).
52. Korn, Don, "Relocation Handle with More Care," Sales Management, August 19, 1974, 21-26.
53. Kunisch, Robert. "Locating the Company's Relocation Program," Financial Executive (Feb 1978), 26-33.
54. Liston, L. L. and C. A. Aiken, "Cost of Owning and Operating an Automobile 1976", U.S. Department of Transportation, Washington, D.C. 1976.
55. Little, Ronald D., LTC. Per Diem: Timely? Just? Air War College, Research Report, Maxwell AFB, Alabama, 1973, p. 6.
56. "Memos: Give Those Transfers a Second Thought." Industry Week, Feb 19, 1979, 11.
57. Merrill Lynch Relocation Management Inc. A Study of Employee Relocation Policies Among Major U.S. Corporations - 1979. P. 1-11, 1979.
58. Military Traffic Management Command, Worldwide Traffic Management Summary, Fiscal Year 1979, Third Quarter, Washington, D.C. July 1979.
59. National Automobile Dealers Used Car Guide Co., "NADA Official Used Car Guide." McLean, Va (1979).

60. "96% of Firms Pay Total Moving Costs for Personnel," Administrative Management, Vol. 29, no. 10 (Oct 1968), 60-61.
61. Office of the Chief of Naval Operations. "CNO Comment Sheet." Subject: Reimbursement for TAD Travel. April 30, 1979.
62. "Official Airline Guide," March 1, 1979.
63. Pan American. "Employee Transfer." Personnel Policy Manual.
64. Per Diem, Travel and Transportation Allowance Committee to the Honorable Robert B. Pirie, Jr., Asst. Sec of Defense (MRA&L), Subject: Increase in Travel Allowances Because of the Energy Crisis, July 12, 1979.
65. Per Diem, Travel, and Transportation Allowances for DoD Civilian Personnel, DoD 5154.20, Department of Defense, June 1964, pp. 1-2.
66. "Quality Inns Travel and Vacation Directory," June 1 - Nov 30, 1979.
67. Robins, James, "Firms Give Employees All Kinds of Assistance to Get Them to Move," Wall Street Journal, May 2, 1979, p. 1.
68. Runzheimer, Rufus Jr., "Factoring Living-Cost Differentials into Salary Levels," Personnel, Vol. 56, no. 1 (Jan-Feb, 1979), 68-78.
69. Runzheimer, Rufus Jr., "Promotion, Raise, and Move Could Cost You Dearly," Management World, V. 7, no. 7 (July 1978), 1, 28.
70. "Survey of Transfer Expense Policy Reveals Range of Company Responses," Administrative Management (Sept 1973), 64.
71. "Those Hidden Moving Costs Can Cut Deep," Business Week, Nov. 15, 1976, 164.
72. "TMs Look at Corporate Moving Policy," Distribution Worldwide (June 1978), 46-47.
73. "Transplanting the Executive Family," Business Week, Nov. 15, 1976, 159-164, 169-170.
74. Unrestricted Line Officer Career Guidebook, Bureau of Naval Personnel 15197A.

75. United States Bureau of the Census, Current Population Report, Series P-20, No. 313.
76. U.S. Department of Defense, Review of Military Travel Reimbursement Entitlements Associated with Permanent Change of Station, by Col. J. J. Reilly, USAF, Executive Per Diem Travel and Transportation Allowance Committee, Sept. 7, 1979.
77. U.S. Department of Labor: Bureau of Labor Statistics. CPI Detailed Report. October 1979. Washington, D.C.
78. United States Statutes At Large, 1st Congress, 1st Session, 1789, Vol. 1, Boston, Charles C. Little and James Brown, 1845, pp. 70, 71.
79. United States Statutes At Large, 1st Congress, 3rd Session, 1791, Vol. 1, Boston, Charles C. Little and James Brown, 1845, p. 216.
80. United States Statutes At Large, 3rd Congress, 2nd Session, 1795, Vol. 1, Boston, Charles C. Little and James Brown, 1845, p. 408.
81. United States Statutes At Large, 49th Congress, 1st Session, 1886, Vol. 24, Washington, GPO, 1887, p. 95.
82. U.S. Code Congressional Service, 81st Congress, 1st Session, 1949, Vol. 1, 2, West Publishing Company and Edward Thomas Company, 1949, p. 2089.
83. United States Statutes At Large, 81st Congress, 1st Session, 1949, Vol. 63, Part 1, Washington, GPO, 1950, p. 166.
84. U.S. Code, Vol. 1, 1976 Edition, Title 5, Government Organization and Employees, Washington, GPO, 1977, pp. 530-544.
85. U.S. Code, Vol. 8, 1976 Edition Title 37, Pay and Allowances of the Uniformed Services, Washington, GPO, 1977, pp. 672-681.
86. Weeks, David A., Compensating Employees: Lessons of the 1970's. New York, The Conference Board, Report No. 707, 1976.
87. "When Executives Transfer, Firms Now Pay For More Moving Costs," Industry Week, Vol. 177, June 4, 1973, p. 55-56.
88. Wikstrom, Walter. Corporate Response to Employees Housing Needs. New York, The Conference Board, Report No. 676, 1975.

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